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MACFORMAT

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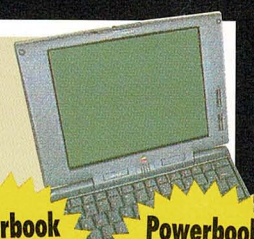

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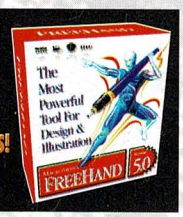

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MACFORMAT

ISSUE 35 ■ MARCH 1996

The Finder

REVIEWS A-Z

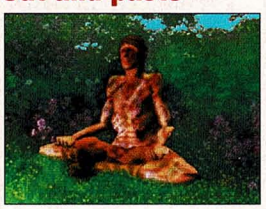
Everything we've reviewed this issue.

The Cat Came Back	107
ColorDrive	86
Comanche	122
Dabbler 2	84
Digby's Adventure	104
DragStrip 2	92
Endorfun	120
Fuji FV-10 Photo-Video Imager	80
It's a Bird's Life	104
Kevin the Kangaroo	98
Klik & Play	90
Marathon 2	116
On Cue II 3.0	94
OneClick	92
Outpost	123
PageMill	88
Painter 4	82
PB Bear's Birthday Party	102
Peter & Julie's Colors Adventure	99
Playtoons: Counterfeit Collaborator	96
Playtoons: Secret of the Castle	96
Playtoons: Uncle Archibald	96
PopupFolder 2	95
Power 120	76
ShadowWraith	121
Sitting on the Farm	107
NEC SuperScript 3000	78
System Shock	118

Are the new PCI Macs really all they're cracked up to be?
See page 36

HOW TO...

Cut and paste 56



It's a key technique in image manipulation and montage – here's a step-by-step guide to image magic using *Color It!'s* versatile selection tools.

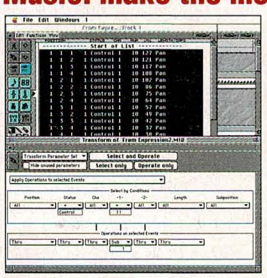
Handle strange text formats 60

You know what it's like: you open that file you got from some bloke, and it's a load of gibberish. In this second part of our guide to handling foreign text formats, we show you how to strip out the garbage.

Databases: searching for data 63

Getting information into a database is easy enough, but how do you use it efficiently once it's in there? Here's a quick guide to all you need to know about searching, retrieving, matches and operators.

Music: make the most of fades 66



Using crossfades and a well-timed tweak of the volume control can enhance your Mac musical compositions dramatically. We show you how to do it.

WIN! WIN! WIN!

Pantone Color Guide 87

Your colours will never fade with a Pantone Color Guide every year for life.

Day of the Tentacle 124

This LucasArts classic is a hilarious B-movie romp and we have ten copies to give away.

Marathon 2 138

We have no less than 12 copies of this addictive, compelling, violent, bloodthirsty, noisy, blimey-look-out-behind-you shoot-'em-up to be won.

REGULARS

Welcome to MACFORMAT 6

All you need to know about MACFORMAT, even our dreams of the ideal Mac-compatible machine.

Your Web Pages 14

We go all slushy for Valentine's Day and guide you to the best romantic Web sites to visit. Awww...

News 19

The facts about Apple's finances, job cuts and takeover rumours. PLUS all the news from the recent Macworld Expo in sunny San Francisco.

What's New 32

More of the latest releases from San Francisco, including the first drawing program that uses QuickDraw GX, a carnival of joysticks, and a new spreadsheet program.

Apple Talk: letters 36

Your views on everything Mac-related, from PCI Mac problems to – oh dear – Windows 95 again.

Talking Point: the 'porn' debate 38

Four readers air their views on rude bits in MACFORMAT.

MacAnswers 69

Your Mac problems solved, from how to keep your Mac healthy and how to interpret things your Mac says to you, to why the Internet is too slow...

Special Reader Offers 112

'I'm free!' Well, at these prices they nearly are... Top deals on specially selected Mac products.

Back Issues 115

Missing an issue? Complete your collection now!

Free Reader Ads 130

Buy, sell or swap in the MACFORMAT marketplace.

Classic System Crew 132

More malarkey with the gremlins in the machine.

Next Issue 137

Your chance to express your creativity in bold new ways as we investigate a booming area on the Mac.

REVIEWS

Power 120 76
We road test of one of the first Mac 'clones' on the market. How does it stack up against the real thing?

NEC SuperScript 3000 78
NEC's new colour printer boasts no less than three different printing modes, so does it make colour printing affordable at last?

Fuji FV-10 Photo-Video Imager 80
It's a digital video camera that also takes stills and scans your trannies or negs too – but is it any good?

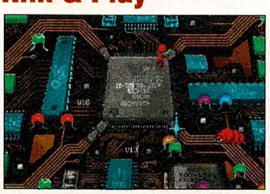
Painter 4: better than brushes? 82
A new, enhanced version of the top Natural Media paint package – it even has tools to create graphics for Web pages and collaborate over the Internet.

Dabbler 2 84
For the young, the novice or the easily intimidated, it's *Painter's* little brother! (Sister? Sibling??)

Pantone ColorDrive 86
Colour matching software for your Mac and your printer. How accurate can it make your printing?

PageMill 88
We put Adobe's Web authoring program through its paces. How easy can it be to write Web pages?

Klik & Play 90



Can a £50 program really be all you need to create your own games, even if you have no programming knowledge at all?

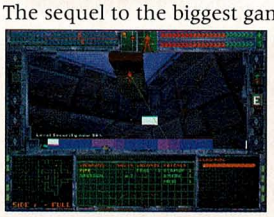
Utilities 92
Automate those boring and repetitive tasks, make launching applications easier and getting around simpler, or add some quicker, slicker controls...

Multimedia for Kids 96
From cats to kangaroos, we assess the lot.

- Playtoons 96
- Kevin the Kangaroo 98
- Peter & Julie's Colors Adventure 99
- PB Bear's Birthday Party 102
- Digby's Adventure 104
- It's a Bird's Life 104
- The Cat Came Back 107
- Sitting on the Farm 107

Shareware Heaven 108
The latest programs from the Internet, including virtual Desktops, snail racing and sugared worms...

Game Reviews 116
The sequel to the biggest game of '95, and more.



- Marathon 2 116
- System Shock 118
- Endorfun 120
- ShadowWraith 121
- Comanche 122
- Outpost 123

FEATURES

ARE YOU BEING SERVED? 45
How good is the advice, service and backup you get when you're buying Mac hardware or software? If only everything in life was as reliable as a Mac...

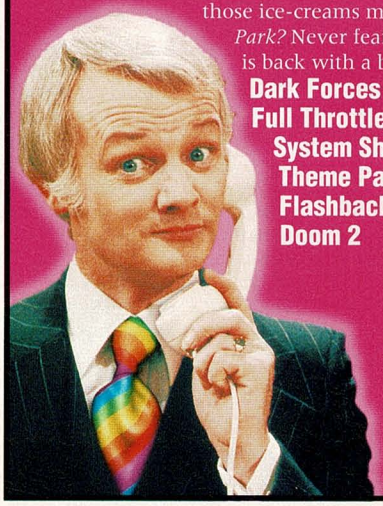
Buyer beware 46
Where can you go to buy a Mac? We put high street shops, Apple Centres and mail order to the test. Plus, the rental option, and are Mac products really more expensive than the PC alternatives?

Service for all? 48
How well are you treated if things go wrong? With full details of Apple's own support services and where you can go to get help when you need it.

Smart buying 50
How to protect your rights and what to watch out for when you're Mac hunting.

Back to the future 52
What does the future hold for Apple's customers?

Gamebusters 126
Is *Dark Forces* driving you to despair? Can't stop those ice-creams melting in *Theme Park?* Never fear, Gamebusters is back with a bagful of tips.



- Dark Forces 126
- Full Throttle 127
- System Shock 127
- Theme Park 128
- Flashback 128
- Doom 2 129

Painter 4 gives you paintbrushes and crayons that are just like the real thing.
See page 82

Kevin the Kangaroo joins a jungleful of multimedia reviews.
See page 98

YOUR COVER DISKS

MACFORMAT comes with a choice of CD-ROM or high density floppy disk every issue:

Your CD-ROM 8
Brilliant demos, with Fractal Design's *Painter 4*, the spectacular *Rebel Assault 2*, *System Shock* and *Klik & Play*. Plus, the ***complete*** *CodeWarrior Lite*, all the software you need to connect to CompuServe (and free connection!), more clip photos, 110Mb of shareware and everything below...

Your Cover Disk 12
3.2Mb of choice software crammed on a floppy, with handy utilities including *CopyQueuer*, *Omega-Window* and *Smoothie*, plus *Shatterball* and *Diagonal* for games fans, and the essential home brew guide.

Welcome to MACFORMAT

Everything you wanted to know about MACFORMAT, and what we'd really like to see in a Mac clone...

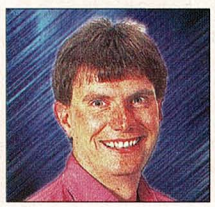
ABOUT OUR WRITERS

ALEX SUMMERSBY

Our Editor learned about Macs by growing up with genuine Apples; but he'd switch to a Mac clone if it had real multi-tasking. That way he could write, answer the phone and attend those meetings all at once. What we'd like to know is why he can't now – seems perfectly reasonable.

RICHARD HILL

This issue our busy, globe-trotting News Ed has brought back the very latest Mac-compatible news all the way from San Francisco. He says he'd rather have a Richard clone than a Mac clone, so one Rich could write the news and the other could play *Marathon 2.*



COLIN DALZIEL

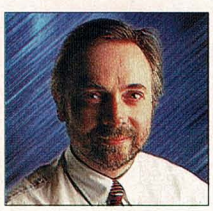
Our Disc Editor used to work in TV production, and when the MACFORMAT office gets a little too quiet he entertains us all with his... er, 'unique' renditions of the latest hits and all-time great tunes. So what else could he want but a combined Mac clone and karaoke machine?

LINDSAY BRUCE

Our Technical Writer spent the month with his head inside a real Mac clone, a Power 120. He'd like a Mac-compatible to run the electrics in his brand new home – put the telly on, make the tea... a built-in recipe book would be handy too.

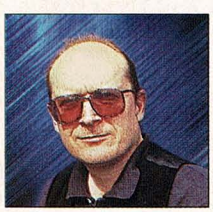
DEREK SMITH

When the Future Publishing network is playing up, Derek remains unflappable as he tries to figure out what the problem is – a comfort to us all in trying times. Still, we'd recommend a clone that can monitor his blood pressure.



ROD LAWTON

Rod's a skilled Mac all-rounder, but not much of a typist. He says, 'My Mac clone would have two S keys and no A, because I'm always hitting the A by accident.' Asked how he'd get the A's to appear without a key to press, he sighs: 'Don't worry – they'll show up when they're ready.'



BRIAN LARKMAN

Our token Northerner is in an outdoors frame of mind: 'I'd strap my waterproof, all-terrain Mac-compatible onto my bike and take it up into the Pennines. Using its pressure-sensitive screen, I'd sketch the windswept moors in *Painter 4.*'

ABOUT MACFORMAT

Welcome again to MACFORMAT, Britain's best-selling Macintosh (and Mac-compatible!) magazine. Every issue we bring you:

- Tips, techniques and tutorials covering the range of Mac applications, from graphics, spreadsheets and databases to music, multimedia and games.
- Features about exciting Mac developments and novel uses, accompanied by Cover Disk programs whenever possible, so you can discover what your machine can do and try things you might not have tried before.
- All the latest Mac-related news, plus all you want to know about the wider issues, the people behind the headlines and the stories behind the stories.
- Authoritative reviews of interesting and affordable products, with clear buying recommendations.
- Cover Disks and CD-ROMs with demos so you can try software before you buy, useful utilities (specially chosen to complement features in the magazine), selected shareware programs, games, readers' contributions and much more.

Whether you're a veteran or a novice, we'll help you get more out of your Macintosh, whatever you use it for.

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We try to ensure that all prices quoted in editorial pages in MACFORMAT are accurate at the time of going to press, and they are all *inclusive* of UK Value Added Tax at 17.5%. However, this may not necessarily be the case with prices appearing in advertisements, so we recommend that you always contact advertisers before ordering to confirm prices and availability. See the cover feature for some helpful buying advice.

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ABOUT OUR REVIEWS

Every MACFORMAT review is designed to inform you in detail of what you'd be getting if you bought the product and help you decide whether it's worth your money. It tells you the essentials, without jargon.

MACFORMAT *does not review demos or unfinished programs.* We review only the finished products you could buy yourself, to help you decide whether to buy or not. We give clear buying recommendations, and rate products on this scale:

- 80+% means excellent.
- 70+% means well worthwhile, though not really outstanding.
- 60+% means good, but with a few shortcomings or some limitations.
- 50+% means acceptable but flawed.
- A rating below 50% means you should think carefully before parting with your money.

The MACFORMAT Classic Award

If a product earns a rating of 90% or more, we'll give it a MACFORMAT Classic Award. This means what it says: we judge the product to be a classic, a standard-setter of its type, something really special.

- We make every effort to verify all the information we publish, but products and prices do change. We always quote list prices (RRPs), but street prices do vary. Shop around, and check with the supplier before buying to make sure that the product you're considering will meet your needs. MACFORMAT cannot accept responsibility for any errors or omissions or for any losses that may arise as a result, but it is our policy to correct any errors of fact whenever we possibly can.
- MACFORMAT welcomes contributions for publication but we regret we cannot return them. Submissions are accepted on the basis of full assignment of copyright to Future Publishing Ltd, *unless* otherwise agreed in advance and in writing. We'll assume that all correspondence is for publication and all CD-ROM demos or readers' submissions may be incorporated on a Future Cover Disk/CD-ROM unless you expressly say otherwise in writing. See also p.37.
- We're just snowed under, so can't reply to mail personally, even if you include an SAE, or to faxes or e-mail. Nor can we answer technical queries over the phone – sorry!

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Colin Dalziel does a trolley dash around the software world to pack this issue's Cover CD with more goodies than the Grace Brothers department store.

There really is something for everyone on this month's Cover CD. Games players have no less than five games to check out, graphic artists will be delighted to see our demo of the new version of *Painter,* Internet fans can try out over 110Mb of shareware without having to wait for it to download, and for programmers we offer the complete *CodeWarrior Lite.*

- Demos: a wide range of interactive demos and samplers, from games to top graphics packages.
- Clip photos: 25 top quality high-res images from the Corel collection.
- *CodeWarrior Lite 1.4:* fully featured development environment.
- *Color It!* images: images for you to use with this issue's image editing tutorial, which starts on page 56.
- CompuServe: all the software you need to get connected to CompuServe.
- Floppy: all the software from this issue's HD Cover Disk.
- Readers' Corner: the section of the CD reserved for your contributions.
- Resources: essential Mac software, including QuickTime 2.1 and Sound Manager 3.1.
- Shareware City: over 110Mb of the latest software from the Internet.
- Shareware in MACFORMAT: all the software from this issue's shareware reviews section, starting on page 108.

FLOPPY OR CD?

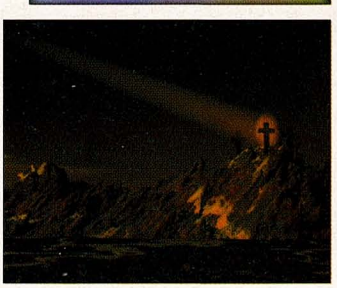
MACFORMAT is available in two editions: one with a CD-ROM and one with a high-density floppy disk. Details of the floppy programs start on page 12. The CD contains all the software that's on the HD Cover Disk, in a folder called Floppy.

Readers' Corner

Your contributions

Requires: see individual Read Me Files

A high standard of artwork arrived in the MACFORMAT office this issue, and we're pleased to be posting copies of Adobe's *Wild Type* to Nick Milton and David Michalczyk for their stunning images. If you'd like to see your work adorn these pages, send it to: Disc Editor, MACFORMAT, 30 Monmouth Street, Bath, Avon BA1 2BW.



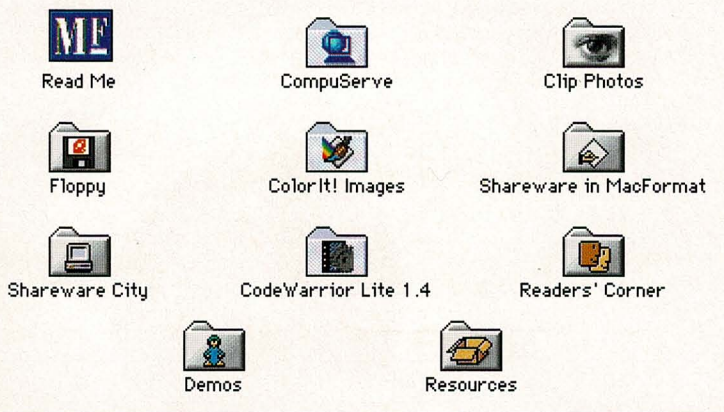
PROBLEMS?

If you have problems quitting any of the rolling demos on the Cover CD, just press **[command] [Q]** and you should go back to the Finder. If this doesn't work, press **[command] [option] [escape]** to Force Quit.

MacFormat 35

Over 610Mb

Over 3,500 files of programs, utilities, clip art, shareware, demos and much more

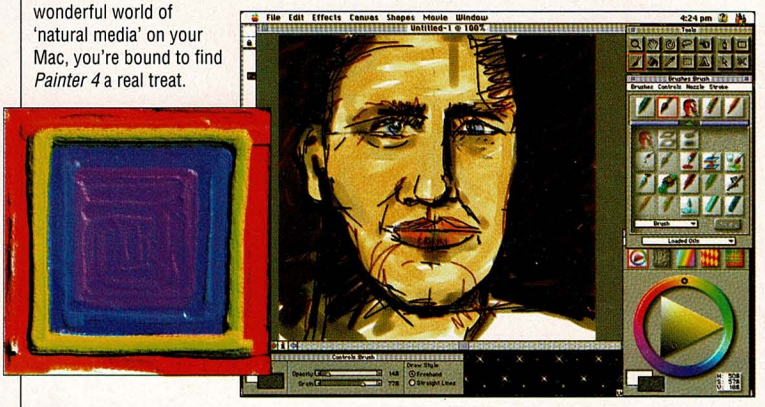


Fractal Design Painter 4.0

Graphics Software Demo

Requires: LCII or better, 6Mb of free RAM, System 7.0 or later

Fractal Design has hit the spot with the latest version of *Painter* – just see the full review on page 82, where it scores 91% – and our save-disabled demo really displays the power of this amazing natural media graphics package. The variety of new features for *Painter 4* includes improved masking facilities, a new QuickCurve selection tool, pull-down menus on the floating palettes, and enhanced image handling. Its functional power, ease of use and painting capabilities make this program unique in its field, so whether you're an existing *Painter* user or are totally new to the wonderful world of 'natural media' on your Mac, you're bound to find *Painter 4* a real treat.



Demos

Various

Requires: see individual Read Me Files

RedShift 2 is a stunning astronomy package that enables you to explore the outer reaches of the universe from your Mac's Desktop. This version gives you access to a guided tour, featuring the History of the Universe, and a view of the night sky with over 25,000 stars.

Also in a scientific vein we bring you *Molecule-3D*, a chemistry student's visualisation aid, which displays the make-up of chemical molecules in clear 3D rotating graphics.

There's more 3D effects with our demo of *Boris Effects*. Use these Plug-ins with *Adobe Premiere* or *Media 100* to produce stunning 3D wipes and effects that will transform your movies.

We've also got no less than five great game demos for you to put to the test. The long-awaited *Rebel Assault 2*, with stunning video introduction sequence, is one not to miss. This demo enables you to try out your flying skills on one of the 16 levels of the game. Watch out for the full review next issue.

ShadowWraith demo gives you a taste of two levels from this testing 2D game. At the controls of a highly manoeuvrable cyberfighter loaded with great firepower, you'll meet plenty of fast attacking enemies, as you search for keys to give you access to further levels. See page 121 to find out more.

Diamonds 3D is a great adaptation of the classic rebound game. It puts you to the test with smooth 3D graphics and ultra-fast gameplay.

System Shock, a PowerMac-only game, is a mixture of shoot-em-'up action and puzzle solving to get through the levels in this highly rated game, reviewed on page 118 of this issue.

Rounding off this issue is a rolling demo of *Day of the Tentacle*, awarded a MACFORMAT Classic rating in issue 33. We also have ten copies to be won, so turn to page 124 and enter the competition.

Klik & Play

Game creation software Demo

Requires: LC or better, 4Mb of RAM, System 7 or later, QuickTime 2.1, Sound Manager 3.1

If you've ever thought of writing your own games but can't get past the variables and functions that are part of real programming, we have the solution. *Klik & Play* enables you to design your own games from a simple drag-and-drop interface – there's no need to know anything about programming. It's reviewed on page 90. To get started, just follow the instructions in the included Read Me file. Once you've created one game, you can start again and design your own. To give you some ideas, we've included seven *Klik & Play* games, which you can play with and even customise.

CompuServe

Internet connection software

Requires: any Mac, modem, phone line

With everyone talking about the Internet, you might just be considering the time has come for you to jump on board. We can offer you a great deal from CompuServe, one of the world's leading on-line information services, with this issue. On the CD is all the software you need to get online, a free Internet address, and ten hours free online time. In return, all you need is to connect a modem to your Mac, and you're ready to go. Simply click on the installer and follow the on-screen instructions. If you have any problems getting connected, contact CompuServe direct (and free) on 0800 289458 for more help.

CodeWarrior Lite

Complete programming environment

Requires: any Mac

If you're serious about programming, you're more likely to use one of the *CodeWarrior* series of development tools than any other on the market. With *CodeWarrior Lite 1.4* for 68K Macs, you can use all the features of this high quality programming environment first hand. This software is fully featured, not save-disabled or a demo, giving you access to libraries, headers, debugging facilities, plug-ins and a variety of programming examples.

If you want to use the files from the libraries as building blocks, you can simply cut and paste relevant sections together; or, if you prefer, you can add your own new code to create your own unique software. To get your own programs working all you have to do is compile the code and hit the Run button. Whichever way you want to work, this powerful software gives you all the tools to develop your very own **non-PowerMac-native** applications.

CUSTOM ICONS

The icons we use on the CD help to give it a friendly atmosphere, but they do slow it down. Install *CDIcon-Killer*, which is in the Resources folder on the CD, if you want to speed things up.

Graphic Explosion

Clip art

Requires: any Mac

60 sample images from the *Graphic Explosion* clip art collection for you to use in your presentations and documents. This collection is one of the first to include a large selection of British-based imagery, such as UK maps, British historical figures and images of culture – which makes a change from American footballers and bald eagles.

If you've ever wondered about what's the best way to annoy a tiger, it's simple – just run over one of its feet with a Rolls Royce…

Continued on next page

Clip photos

The selection on this issue's Cover CD comes from the 2,500 images in Corel's People, Places and Things collection.

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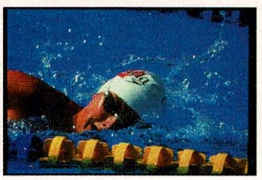
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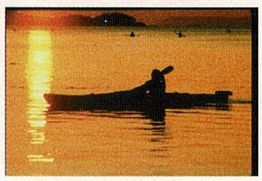
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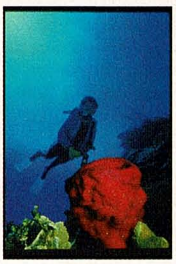
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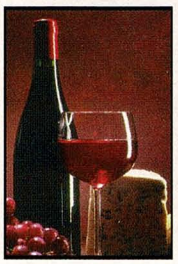
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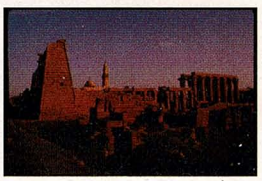
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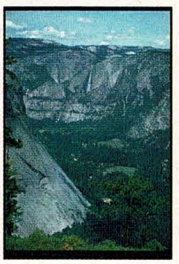
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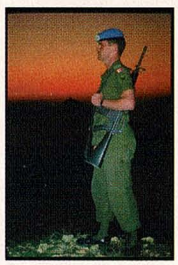
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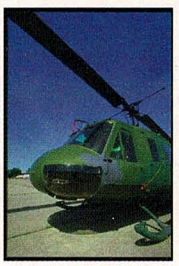
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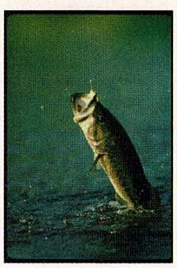
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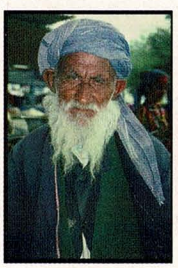
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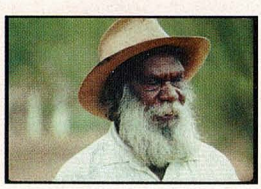
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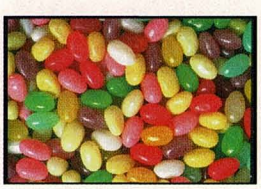
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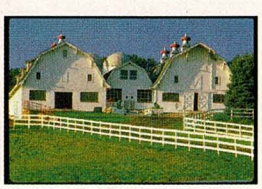
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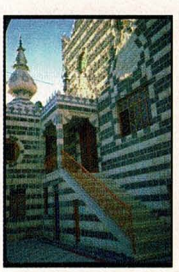
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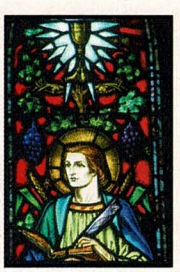
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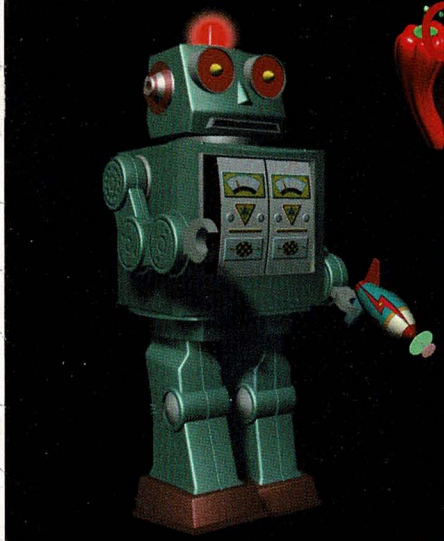

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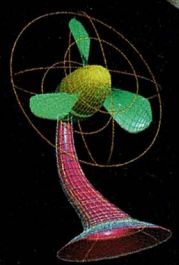

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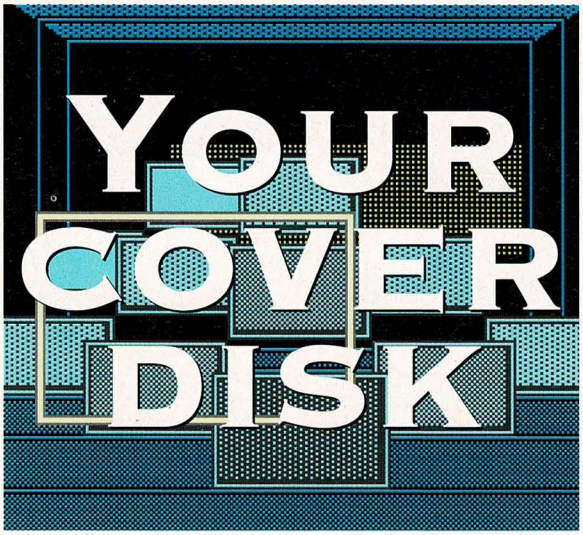
Images and models: Pierre Bretagnolle, Yann Le Coroller, Bruno Vaerman. Images rendered with 3D Studio, Electric Image and Studio Pro.



As the days start to get longer, our Cover Disks just seem to get bigger and bigger. Colin Dalziel tells you what's in store on this issue's fantastic floppy disk.

We have no less than 12 items to tempt you with on this issue's floppy Cover Disk, from addictive games to tips for brewing your own beer. There's also a great range of utilities, some of which will help take the hassle out of those essential jobs, such as backing up files, while others simply make using your Mac more fun.

START HERE

High density floppy disks normally contain up to 1.4Mb of software, but to bring you as much as possible, we use a compression program to fit more on. So you need to decompress the software before using these disks, and this issue you'll need 3.2Mb of hard disk space. We also recommend that you always make a backup of the MACFORMAT Cover Disk, just in case anything goes wrong. Here's what to do...

1 Ensure the original Cover Disk is write-protected (move the tab so that you can see through the hole).
2 Insert the MACFORMAT disk.
3 Drag the Disk's icon over your hard disk's icon.
4 The contents are copied onto your hard disk, but are still compressed and cannot be used yet.
5 Drag the Cover Disk icon to the Wastebasket to eject the Disk.
6 Insert a blank high density disk.
7 Drag the MACFORMAT 35 folder from your hard disk onto the blank disk's icon to make your backup.

To decompress the Cover Disk, open the MACFORMAT 35 folder on your hard disk.
1 Double-click on the MACFORMAT 35 icon.
2 Click **Continue**.
3 A box then asks you where you want to save the software. Choose the place on your hard disk where you want everything stored and click **Save**.

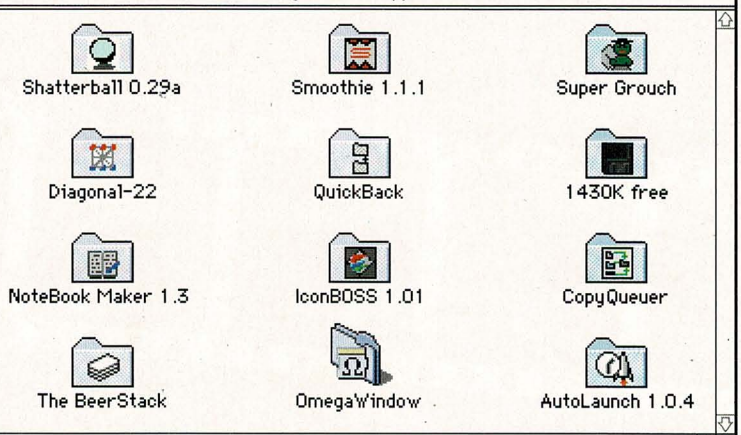
Before installing the Cover Disk, we always recommend that you back up any important work on your hard disk. This precaution will avoid problems should it transpire that any of the software isn't compatible with your setup.

We make every effort to check our Cover Disks for compatibility and viruses, but the information here is intended as a guide only, and MACFORMAT cannot be held responsible for any damage to data, any inability to use this software or any resulting losses. So please, take the precaution of backing up first.

MacFormat 35

3.2 MB in disk

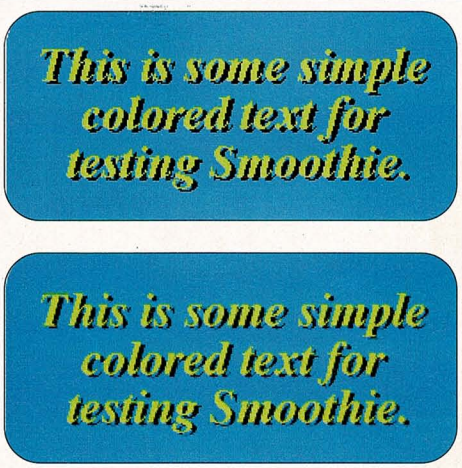
Utilities, games and applications



Smoothie

Graphics utility

Requires: colour Mac, System 7 or later



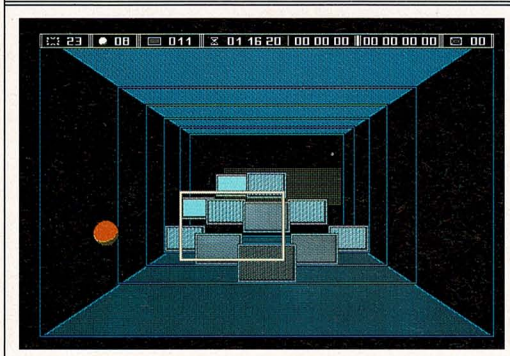
If you ever use your Mac to produce graphics, you may have been disappointed with the jagged edges some applications produce. *Smoothie* is a cunning little program that transforms your basic jaggy lines and takes out the roughness. The program works on object-oriented images, so it won't improve scans and photographs, but it can smooth text, lines and curves created in drawing packages. The final results you get using *Smoothie* give your images a thoroughly professional look.

Smarten up your on-screen graphics at the click of a button.

Shatterball

Game

Requires: any Mac, System 7 or later



Shatterball is an excellent shareware adaptation of the classic rebound game. As you'd expect, there's much more to it than just knocking a few bricks out. This version has wonderful 3D graphics – you can spin the ball at different angles and catch it as it flies towards you, to help you change your angle of attack. There are 24 levels to put you to the test, giving you plenty of time to perfect your batting skills.

GOT A PROBLEM?

If either your cover-mounted high density disk or CD-ROM is defective, return it to us and we will replace it. Please make sure you have followed the installation procedures described in these pages correctly, to ensure that there is a physical problem with the disk itself. Otherwise, the replacement will be just the same!

Return HD disks to:
TIB plc
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Bradford, BD4 7BH

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Future Publishing
FREEPOST (BS4900)
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Enclose a self-addressed padded envelope (but we'll pay return postage) with the disk or CD, and a description of the fault. Please do not return disks or CDs to the editorial office; we don't hold any stocks of them and can only refer you to the addresses above.

Utilities

Various

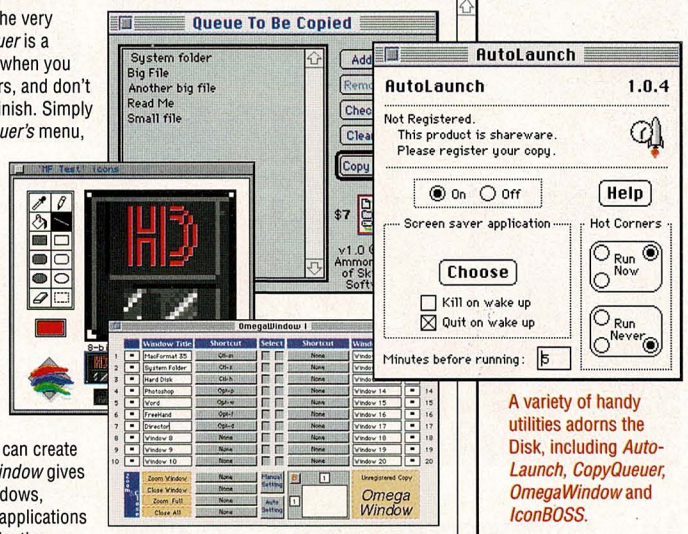
Requires: see individual Read Me files

These utilities cover everything from the very useful to the purely-for-fun. *CopyQueuer* is a useful application for those instances when you need to copy files from different folders, and don't want to sit round waiting for each to finish. Simply define the files to copy from *CopyQueuer's* menu, then hit the Copy button. You can even tell *CopyQueuer* to switch your Mac off when it has finished.

AutoLaunch is a screen saver with a difference. Instead of displaying pretty patterns, it opens your chosen application after your Mac has been idle for a set period. You could use it to display your favourite QuickTime movies or *Director* presentations, for example.

Custom icons make your Mac a more friendly, presentable machine. Now, with the help of *Icon BOSS*, you can create your own mini works of art. *OmegaWindow* gives you mouse-free control over your windows, enabling you to switch between open applications at the press of a predefined key combination.

If you often use floppy disks you'll have come up against an annoying error message that tells you an extra 3K is required to complete copying. Well, *1430K Free* squeezes an extra ounce of space from your disk so that you can get your oversized file on there – although, of course, soon 1,430K just won't be enough... *QuickBack* enables you to control what you're backing up and gives you a log of the files copied, so you know what's up to date and what's not. And finally, *Super Grouch* is a slightly altered version of the ever popular Wastebasket enhancement Extension *The Grouch*. With this installed, when you empty your Wastebasket you'll not only get the singing Grouch, but also a *Monty Python* inspired 'Spam' yelled at you!

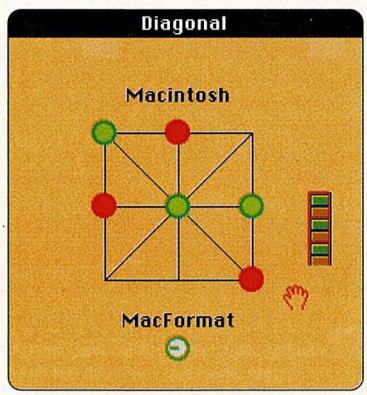


A variety of handy utilities adorns the Disk, including *AutoLaunch, CopyQueuer, OmegaWindow* and *IconBOSS*.

Diagonal

Game

Requires: any Mac, System 7.0.1 or later



If you like tactical challenges, you'll have many hours of frustration with *Diagonal*. The problem you face in this seemingly simple game is to get your three pieces into a diagonal line across a three by three grid before your opponent does. It all sounds simple, but you're up against the mighty computational thinking power of your Mac, so you'd better keep your wits about you if you want to succeed. Top tip: it's always a good idea to keep control of the central point of the board.

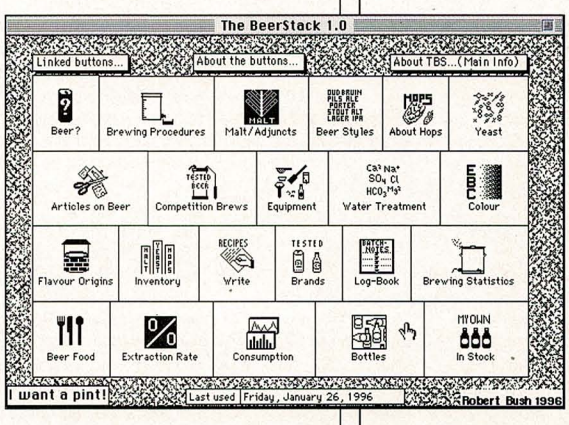
Take on the might of Macintosh in this puzzle game that's a cross between *Noughts and Crosses* and *Draughts*. Challenging...

BeerStack

Beer brewing tutorial

Requires: any Mac

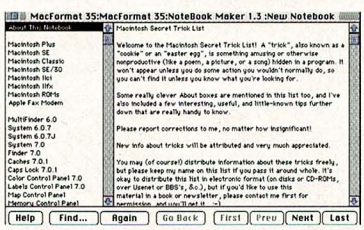
As many male students know, having a go at brewing your own beer is an essential part of life. Most people's first few attempts centre around popping down to the local chemist and getting a kit that makes 40 pints for about 5 pence a pint. What usually turns up at the end of the long wait is a foul smelling cloudy liquid that tastes like it's had a pair of socks soaked in it. *BeerStack* gets down to the nitty gritty of brewing your own beer properly. It gives you a wide range of suggestions for getting your beer to taste as good as it does down the local, plus descriptions of all the equipment and ingredients you need to get started. Impress your friends, and save a fortune on your beer budget in the process – *The BeerStack* is your perfect drinking buddy.



NoteBook Maker

Standalone document creator

Requires: any Mac

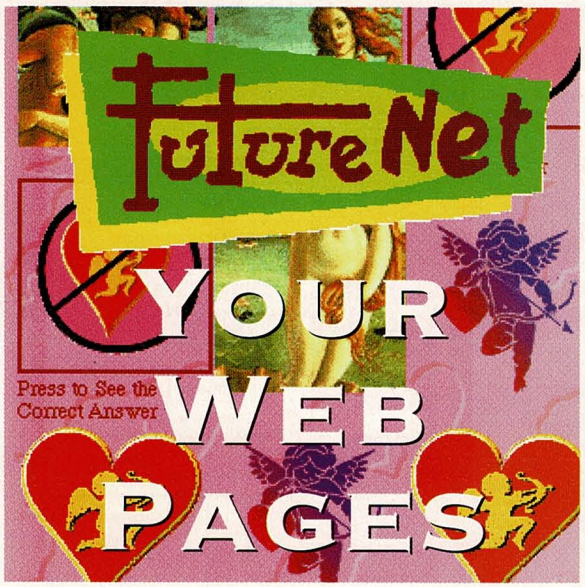


Included with the *NoteBook Maker* software is a demo text file, which gives away secret messages hidden in popular software packages.

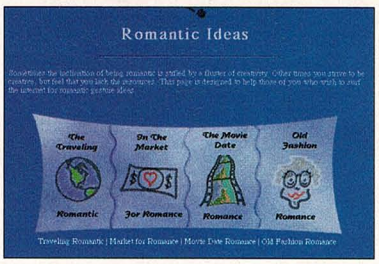
There are a few programs about now that enable you to create your own standalone documents, but none is easier to use than *NoteBook Maker*. This flexible program offers you a quick way to import text, images and even sound into scrollable documents. You can add indexed headings to each section, so that your readers can quickly get to any part of the document with a click of the mouse. You then simply save the file, and anyone with a Mac can view your document without needing to have any specialist software installed on their Mac.

FLOPPY TOO

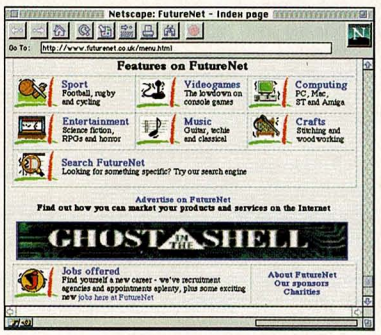
We are always on the lookout for readers' contributions for the floppy as well as the CD, so don't be put off just because you don't have a CD-ROM drive. Send them in to the address on page 8.



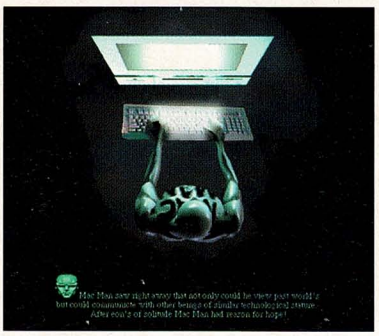
From the Heart – a collection of romantic prose and poetry that you'll treasure forever. Part of our soppy Valentine's special.



You're planning that next date, but perhaps you're stuck for inspiration. The Romantic Ideas site comes to your rescue.



Future Publishing's Web site, FutureNet, features thousands of pages of good reading from all our magazines – and it's absolutely free!



The *Mac Man* interactive story is one of the areas you can reach through the Ultimate Macintosh – now accessible via MACFORMAT's site on FutureNet.

As a counterpoint to all the cash talk this issue (starting on page 19), MACFORMAT's Web pages get all cute and slushy for February. We bring you coverage of all the most romantic sites on the Net.

Getting connected

All you need to connect to FutureNet is a modem and an Internet account like CityScape or Maxis On-Line, or a direct server connection through work or college. There are no hidden charges – FutureNet is free! Use your World Wide Web browser to connect to

http://www.futurenet.co.uk/

FutureNet, Future Publishing's own Internet site on the World Wide Web, continues to grow, with thousands of new pages and 140,000 registered users. You'll find features on subjects like computing in MACFORMAT, music through *Classic CD* and *Total Guitar*, and SF and fantasy in *SFX* and *arcane*.

MACFORMAT's own pages include the latest news, plus features and reviews from the magazine. Our World Wide Web Road Map section has loads of links to useful Mac resources – plus some frivolous stuff too. And now the Ultimate Macintosh section offers you dozens of links to other essential Mac sites on the Web. Compiled by Michael Yee, our Ultimate Macintosh area is actually a reprint – or 'mirror' – of the original, which is based on a computer in California. You'll find it quicker to use our page, rather than waiting for it to arrive through the Net from the US.

The page includes links to the highlights of Apple's own sites, and to the best of Mac Internet software and programs for you to download on to your machine. There are pages where you'll get tips and advice on hardware and software problems, an enormous games section, a list of key Mac companies and a guide to the best of the other Mac jumplists.

RICHARD HILL

LINKS FOR THIS ISSUE

Our Web page features news, features and helpful links to pages that cover the Mac and other subjects, but with this issue coming out so soon after Valentine's Day, we've become a Web page of lurve. You can visit any of the following sites by typing its address (given below each title) into the Location line of your Web browser, or go to the World Wide Web Road Map section of MACFORMAT's pages on FutureNet. There you can find direct links to each of these sites, and any addresses mentioned elsewhere in the magazine, as well as dozens of others. You'll find this issue's links in a special Valentine Road Map section, which will be maintained until at least Friday 19 April.

Aaron and Heidi

http://www.isds.duke.edu/~heidi/mit_home.html

More disturbing than *Seven* and twice as likely as *Reservoir Dogs* to make you physically sick. Have you got the stomach to visit Aaron and Heidi's Home Page? This site keeps you up to date with the love affair of the sweetest couple in America – the first fateful encounter, the matching jackets, the bean bag elephants… snuggle up with your own Fluffy Bunny and share the magic.

Cupid's Network, Inc.

http://www.cupidnet.com/cupid/

Find out how people are using the Internet to get together, with this jumplist set of links to dating agencies and other related, rampantly commercial, Web services. There's also a list of important do's and don'ts, should you try any of this out.

The Cyrano Server

http://www.nando.net//toys/cyrano.html

Tongue-tied and lonesome? Send the one you love – or failing that, fancy rotten – a love letter penned by the computer version of the tragic poet Cyrano de Bergerac. All you need to do is provide details of your relationship and the type of letter you want, then let Cyrano do the rest. You'll have the object of your desire eating out of your hand, trust us.

From the Heart

http://www.wbm.ca/users/kgreggai/html/heart.html

Nothing stirs the heart like poetry, and this site is full of it. Cry me a river with outpourings of affection from Net users around the world. You're invited to contribute your own verse too.

Mark's Apology Note Generator

http://net.indra.com/~karma/formletter.html

In Mark's own words: 'Sometimes, all it takes is an apology. I've resorted to using this simple form for all my butt-kissing needs.' Whatever you've done wrong (or whatever you're getting blamed for), you can assemble a grovelling apology with ease, using multiple choices to send an e-mail that says you're sorry.

Romantic Ideas

http://mondrian.math.swt.edu/~bg01699/ideas/ideas.html

If you want to organise the perfect date but are stuck for ideas, this jumplist can send you to places around the world that will help you out. Set up a trip abroad, get a box of chocs, pick out the perfect video or find a special gift – all from the comfort of your Mac. Delight the one you love, without spoiling your *Marathon* session.

The Reader's Corner

http://www.quake.net/~autopen/

If you love to read about romance, dream about fantasy novels or have an addiction to mystery stories, this site offers you a guide to finding the best book on any of these subjects. Far more than a list of titles, the site has essays and poems, as well as helpful info on unfamiliar authors.

The Valentine's Day Game

http://equity.stern.nyu.edu/Valentine/

Try out your deeper knowledge of love and romance with this well-constructed Valentine quiz. Answer multiple-choice questions correctly to read an evocative poem – the more you answer correctly, the better the class of rhyme you receive. We've used the puzzle as our background for the logo at the top of the page.

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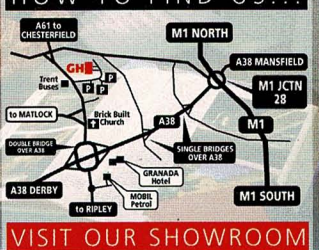

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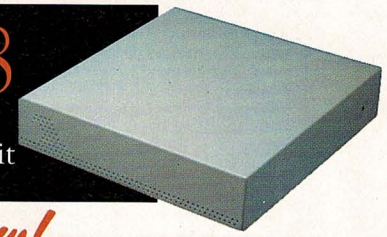

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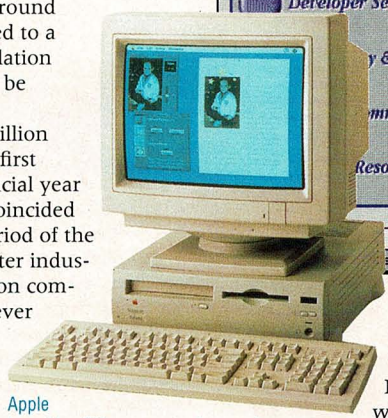
Losses and job cuts ahead for Apple; takeover gossip; plus the hottest releases from Expo. News Editor: Richard Hill.

Apple put on the rack

Apple faces a tough year ahead as it fights to redefine itself in the face of poor financial results and criticism of the way it operates. The difficulties the company is having were highlighted as it announced it had made a loss in the three months up to Christmas 1995 – despite setting new records for Mac sales.

The firm also announced measures designed to turn its fortunes around, which included significant job cuts. But the results and Apple's response seem to have sparked a crisis in confidence within and around Apple, which has led to a huge level of speculation that the firm might be bought up.

Apple lost $69 million (£45 million) in its first quarter for its financial year of 1995/6, which coincided with the busiest period of the year for the computer industry. It sold 1.3 million computers, its highest-ever total for a quarter. This includes one million PowerMacs, the first time the magic figure has been hit. Added to its printer, CD-ROM drive and software sales, Apple took in around $3,100 million (£2,000 million), but it spent more than it made.



Apple is making little money on low-cost Macs like the Performa 630, despite high demand, and is having to rethink its tactics.

The company said it had got its forecasts wrong, and had made too many of some kinds of Mac, such as Performas and PowerBooks. In Japan, which is now one of Apple's most important markets, there was a damaging price war among firms because of the surging interest in computers. The situation in Japan was the most dramatic example of a new long term problem for Apple – it makes roughly half as much profit on each Mac it sells as it did a year ago, while the number of Macs it sells has gone up by 12%. Money is going to be hard to come by.

Apple has now embarked on the painful task of cutting costs: 1,300 of its 16,000 full and part time employees are to be made redundant. Most of the job cuts are to come from sales, marketing and administration departments, rather than research or technical support. And it's unlikely that the UK and Europe will be heavily affected. Sales in Europe grew by a healthy 18% during 1995 – much higher than the worldwide average.

Apple is re-appraising the way it operates in each of its main markets. The first move will be to simplify its product line, reducing the number of different Macs it sells. This shouldn't mean you have less choice when buying – Apple UK has worked hard to create today's coherent line of four Performas and four PowerMacs. But in the US, phasing out slower Macs more slowly and deals with shop chains to offer exclusive Macs mean there are currently 15 types of Performa to choose from.

Apple is suffering from lack of profits, but the Mac is more in demand than ever, with record sales.

Despite its support of the Internet, Apple seems to have miscalculated the effect the medium's growth will have on the type of Macs it sells.

UK TRIUMPH

Research firm Wharton Information reports that Apple enjoyed a 15.2% share of Britain's surging home market in 1995 – a vindication of the UK arm's carefully-planned product line-up.

Michael Spindler: 'We made progress against our stated goals, but clearly we fell short.'

Spindler speaks out

Apple Chief Executive and key decision maker Michael Spindler put up a robust defence of his policies, at the recent Apple shareholders meeting held to discuss the results. Looking back at Apple's performance in 1995, Spindler confessed: 'We made progress against our stated goals, but clearly we fell short.'

He reasserted the company's commitment to its existing customers and to the areas where the Mac is

Continued on next page

already most popular, such as the home, education and graphics and multimedia. After highlighting the increased sales the Mac enjoyed during the year, he added, 'We are fully committed to open licensing of our technology. It is fair to say that our licensing was behind schedule in 1995, something we intend to fix in 1996.'

Spindler then turned his attention to the recently-announced poor financial results for the last part of 1995, the hectic Christmas buying season. 'In the quarters prior to [this period], the demand for our products outstripped our projections, and exceeded our supply.

'As we prepared for the Christmas selling season we took many actions to ensure product availability. We increased capacity and increased our inventory of key components. We shipped a significant amount of new product into the channel at the end of September. At the same time, we increased our promotional activity. It was – we thought – a solid plan. So, what happened?

'First, the computer industry saw a very different consumer pattern and profile [this Christmas], compared to the same quarter a year ago. Second, we had some internal issues.'

Spindler said that 1994 saw a surge in computer sales, as the multimedia computer became the buying fad. In 1995, by contrast, it wasn't multimedia but the Internet that became the buzzword; and customers either just bought modems for Internet connection or sought out the cheapest possible computers rather than all-singing, all-dancing multimedia bundles. In fact, Apple wasn't the only company caught out by the shift in buying trends. Major rival Packard Bell has also reported disappointing sales over Christmas.

'Sales at the entry level and in the PowerBook space were particularly soft compared to our original plans,' reported Spindler. 'The PowerBook still suffers some perception problems from earlier technical glitches, and we were hampered by the lack of a CD-based portable offering. The other major contributor to Apple's poor performance was the extremely fierce pricing environment in Japan, which provides between 15 and 20 per cent of Apple's overall revenues.'

So, if Apple has successfully isolated the problems it faces, what is it planning to do about them? 'Apple's management team considers the company situation as serious, and we are treating it as such. We have a sense of urgency, and are fully committed to working through the challenges. This is a painful period, and we are working to put it behind us.'

Looking to the future, Spindler promised: 'Nothing is sacred. Every area of Apple's business is under examination as we reconstruct Apple. But some of the fundamental changes will take time.

'It is clear that, in the environment that I have described, our old personal computer model as we defined it does not work economically in filling the needs of the low-price segment of the entry-level market.'

Spindler promised exciting new products using a broad licensing model for home users, utilising technology and Apple's strengths in growing trends like the Internet to set its products apart. According to Spindler: 'Beyond this, I cannot say much, since there are other parties involved. Let me make one thing very clear – Apple is not getting out of the consumer market. We plan to expand the Mac platform in a number of ways.'

Bad press

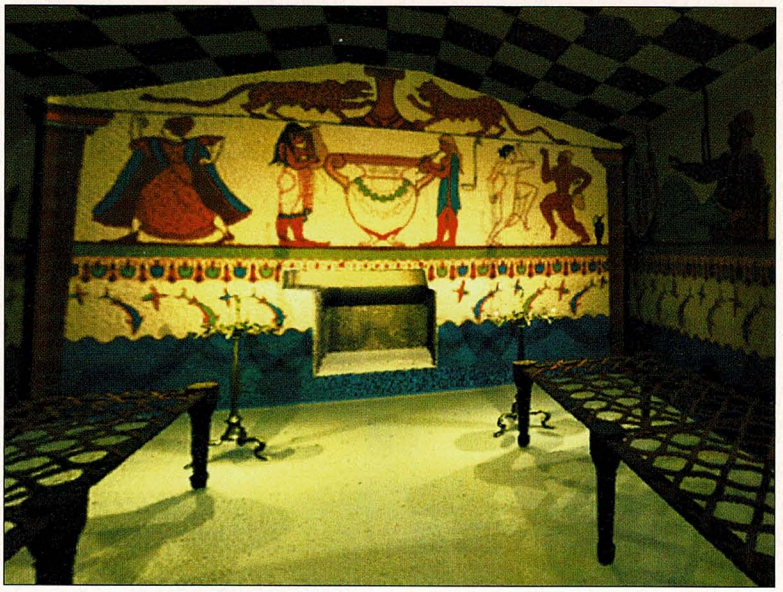
Even before the results had been announced, industry and media speculation that Apple was facing trouble had been mounting, leading to a flood of rumour and misinformation. Apple had attempted to pre-empt the gossip by hinting at the extent of its losses and its plans to correct things one week before the official announcement, but to little effect.

The Guardian, for example, recently reported that Apple was planning to cut 3,500 jobs and pull out of the home market altogether. Meanwhile, in the United States, the influential business paper *The Wall Street Journal* claimed that Apple was in urgent

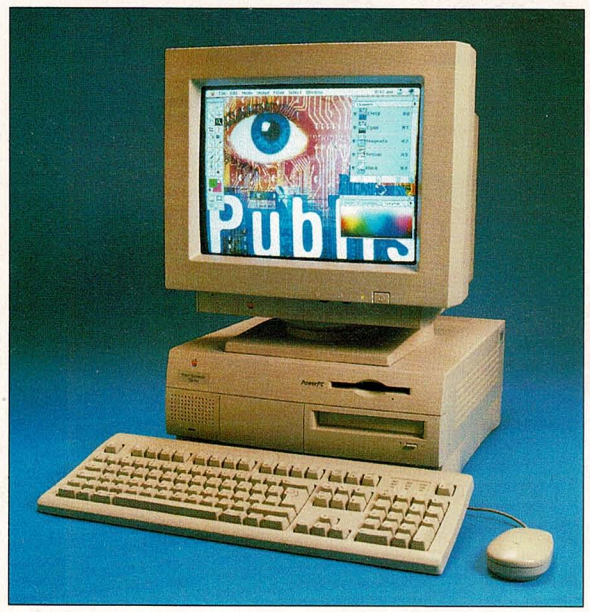
Continued on next page

Mac System Upgrade Soon

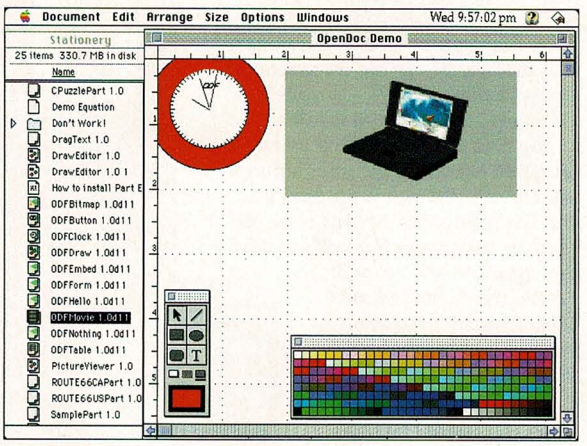
System 7.5.3 is due for release in the next few weeks. If you have System 7.5 or higher on your Mac, you'll be able to install this and reap benefits like faster copying of files. Unlike 7.5.2, which was released only for PCI Macs, this will work on any Mac with 7.5.



QuickTime VR is an example of cool Apple technology that makes little short term money.

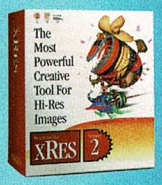


Developments like the PowerPC chip and the use of PCI in new Macs are paying dividends.



One of the big questions of 1996 is how the OpenDoc system will affect Mac sales.

Spindler: 'Nothing is sacred – but some of the fundamental changes will take time.'



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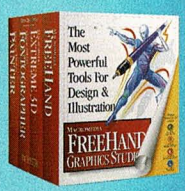

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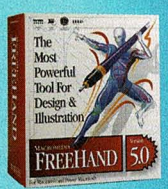

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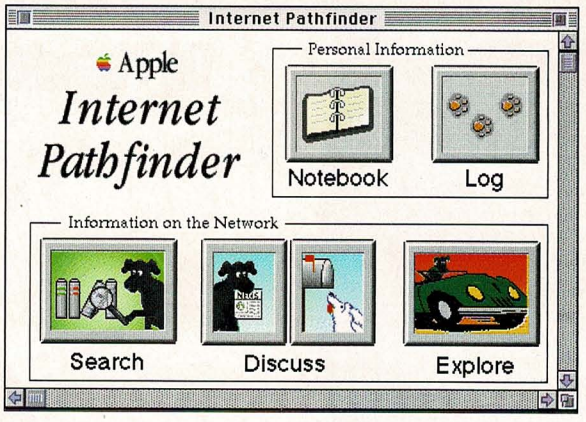
WHO IS SUN?
Sun Microsystems makes powerful computers used to run networks or Internet systems, or to produce high-quality graphics. Great things are predicted for Java, its Net programming language and browser.

Apple has innovative new software and hardware waiting in the wings, including its 'Cyberdog' Net system.



The Newton system was 1995's most unexpected success story – after being written off years ago.

discussion with Sun Microsystems, a maker of high-cost workstations and Internet computers. Sun was reported to be offering around $4,000 million (£2,600 million) for Apple.

The only official comment has been a blunt 'Apple is not for sale' from Apple president Michael Spindler, while Sun head Scott McNealy mischievously told one paper he didn't comment on takeover rumours 'no matter how inaccurate they are'. But Apple Europe chief Marco Landi hinted at some activity going on below the blanket 'no comment' statements. He said that Apple was considering two options: making cuts and changing direction to become smaller but more profitable; or making ties with another company to build on the strengths of each. He expected the decision to made by the end of February.

Marco Landi: 'Several companies are deciding what they could propose to Apple.'

'There are discussions with several people,' Landi told *The Wall Street Journal Europe*. 'Several companies are making their own evaluation on what could be in their interest, and what they could propose to Apple.'

Brain drain

One of Apple's most pressing problems is to find the right people. After its chief financial officer Joseph Graziano left late in 1995, reportedly because of disagreements with Spindler on Apple's future direction, four more top people have quit. Three marketing bosses joined the general manager of Apple's on-line service eWorld in quitting shortly before the financial results were announced.

But Satjiv Chahil, who was overseeing Apple's Pippin project and work in multimedia and entertainment, has been promoted to head up Apple's marketing and promotions division. And Heidi Roizen, the boss of multimedia firm T-Maker, has joined Apple to head up developer relations. She is a well-known figure in the industry after serving in the Software Publishers Association and has often been a critic of Apple, so the timing of her arrival is significant. **MF**

MACFORMAT COMMENT: LOOK FOR THE BIG PICTURE

Losses, job cuts, takeover rumours... Apple certainly has its work cut out if it wants to turn itself round. But it has one good thing going for it – the Mac. While Apple seems in disarray, the Mac is in demand.

The basic reason behind all these problems is that Apple didn't realise soon enough that it couldn't compete alone against a collective of companies that share technologies and ideas – each keeping its costs down while Apple bore everything on its own shoulders. While it did eventually realise this, some time ago, it hasn't moved quickly enough to fend off the inevitable crash. The momentum of the Mac is too strong to hold Apple back for very long, but it does need to consider its next moves carefully.

Pippin is an exciting idea and proof that Apple has learnt some lessons; but has the penny dropped too late?

Apple is probably talking to Sun and several other companies. When you're running a business where hundreds of million of dollars are at stake, you should be reviewing your options as soon as you sense a change in the weather – this is how computer business must be done nowadays. It's all part of the short-term thinking among financial dealers and industry pundits that characterises their reactions to Apple's results, which are a symptom of a long-term strategy blown off-course.

You can be sure that, when you hear rumours about a takeover bid, it's because someone wants you to hear them. It's all part of the game and doesn't mean anything in itself. Apple could be bought by Sun or someone else, or not; for a higher price than mentioned in the latest reports, or lower.

Whether or not Apple is bought, it doesn't change the challenges and opportunities the company faces today.

Apple has taken positive action to share the load of developing the Mac. As few as its licensees for the Mac OS are at the moment, each of them is well placed to help Apple in crucial areas.

Apple's deal with Bandai to launch the Pippin multimedia and Internet console is proof that Apple realises it isn't big enough to tackle the home consumer market single-handed. With Pippin, Apple provides the ideas and technology, while Bandai offers its marketing know-how. Other companies will also support Pippin, increasing its chances of making the project a success.

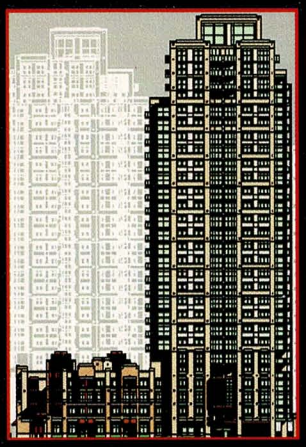
Power Computing is pioneering low-cost industrial design ideas that enable it to make money while it charges you less; while DayStar is helping Apple redefine the high end of the Mac. Apple and DayStar are collaborating on multiple processor technology that will enable the Mac to match the speed of machines put out by Silicon Graphics and Sun at less cost to the customer. Whole new opportunities will open up this year.

And then, late this year or early in 1997, the PowerPC Platform will arrive. This computer system, a standard agreed between Apple, IBM and other major players, promises to set new benchmarks for speed and flexibility; and the Mac OS will play a crucial part in its success. Expect the floodgates to open on applications to build Mac-compatible systems. The potential is too much for the computer industry to ignore, and the Mac OS will be in a position where millions more people have a chance to use it and discover its merits.

Apple's present bad shape is because of decisions made years ago, and can genuinely only be corrected over a similar time scale. There is no quick fix. But its underlying finances are healthy, and it's moving in the right direction; you can argue about the rate of change if you like. What it really needs to do immediately is stop acting like it's beaten.

It has great products, better ones on the way, and few other corporations can count on such passionate support from their customers. It needs to go on the attack; tell its virtues to anyone who'll listen; use the media to show how positively it's acting. Apple needs to accept that it's caught in the industry spotlight, and make the glare work for it instead of acting like a dazzled rabbit. **RICHARD HILL**

MiniCad 6.0



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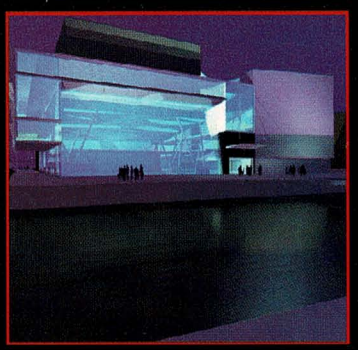

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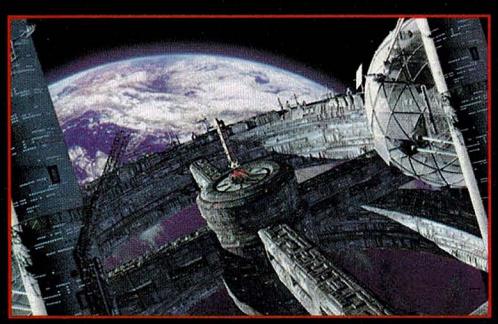

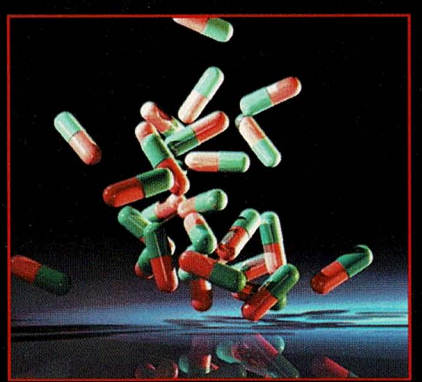

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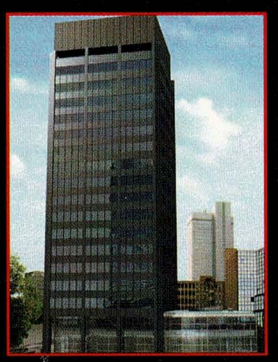

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Mac jamboree

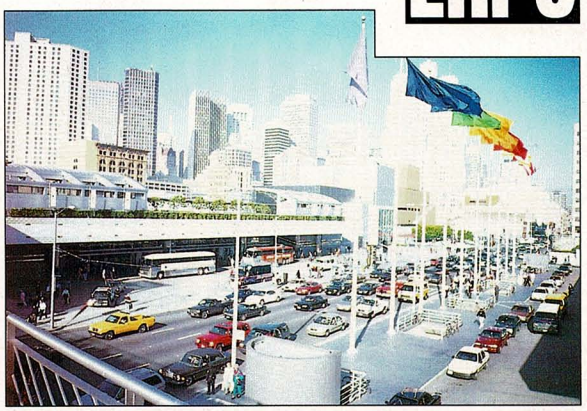
EXPO

Thousands of Mac devotees testified to the strength of the Mac in January, as the new year started with an explosion of new programs and hardware. The Macworld Expo in San Francisco welcomed around 80,000 people in four days, as over 500 companies showed off their latest products.

This most recent of the exhibitions, which are held every winter and summer, was not a show of big new ideas, but rather of familiar themes continuing to develop, while the veil of secrecy was drawn back just a little on exciting future possibilities.

Unusually, Apple had no new Macs to announce, although some are on their way. But new computers were definitely an important part of the show, courtesy of Power Computing, DayStar Digital and a surprise from UMAX (see the story below).

While new products for the Internet and multimedia obviously dominated the show floor, the clear wider trend was for low-cost, simple products. Ranging from Adobe's *PhotoDeluxe* to the continuing renaissance in storage devices, computer firms have got the message that you want well-designed, good quality and easy-to-use software and hardware. Look out for more details of the products mentioned on the next few pages, as and when they become available in the UK.



80,000 visitors flocked to see the latest Mac gear in the unusual setting of San Francisco's Moscone Centre – the action takes place under the road.

New computers – but not from Apple

Power Computing, the first company to produce Mac-compatible machines that can run Mac software, showed a new computer to kick off its low-cost range for the home and small office. It also announced a link-up with Microsoft, adding clout to its business machines.

The first PowerCurve, as the new machines will be called, has a PowerPC 601 processor and a clock speed of 120 MHz, which puts it broadly in line with Apple's PowerMac 7500. The main processor chip is mounted on a card – the daughtercard – which is separate from the other chips in the machine. The idea is that you'll be able to swap your processor for faster versions as they come on to the market, saving the expense of buying a whole new computer.

The PowerCurve also has three PCI slots (Peripheral Component Interconnect – the expansion card system that's replacing NuBus in Macs). It comes with a minimum of 8Mb of memory and an 840Mb hard drive. The PowerCurve joins the PowerWave range, which uses the faster 604 processor for big businesses and demanding graphics studios.

The machines are still not widely available in the UK, although mail-order dealer Computer Warehouse should now have them in stock for around £1,940. For more details on this call CW on 0171 724 4104.

Power is looking at ways to raise its profile in the UK and the rest of Europe, to make sure that it's easier for you to get their computers. Look out for an announcement by the Summer.

Meanwhile, Power is to supply Microsoft's best-selling *Office* suite of programs with some of its PowerWave and PowerCurve machines. *Office* includes *Word*, the *Excel* spreadsheet and the *PowerPoint* presentation software. The new bundles will go on sale in the Spring.

The new PowerCurve uses a 601 PowerPC chip and comes in choice of setups, including Power's distinctive low-profile case on the right.

SuperMac returns

The well-known SuperMac name, which you may remember produced a range of monitors before the firm was bought by Radius, is to be revived for the latest Mac-compatible computer. UMAX is to launch the SuperMac StormSurge 150, a professional system using the PowerPC 604 chip. The machines will be made by Radius, whose own Mac-compatibles have met with little success. The deal between the two firms means UMAX will gain Radius' technology and even some of its staff, indicating that Radius is planning to go back to its core business of selling video editing suites and cards.

The StormSurge will have six PCI slots and two slots ready for processor daughtercards. You'll be able to add another 604 chip to the existing one, making the machine work at up to twice the speed instantly. This multi-processor option is set to become one of the major trends of 1996, with Apple, Power and DayStar all working on machines and accessories to make your Mac run faster.

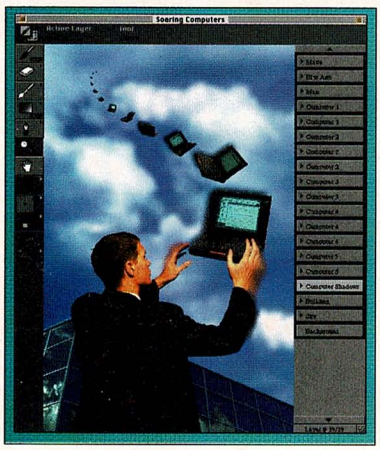
Continued on next page

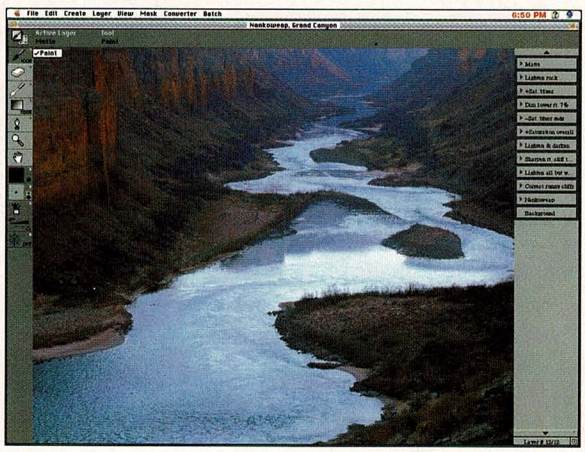
Rent-a-Nerd

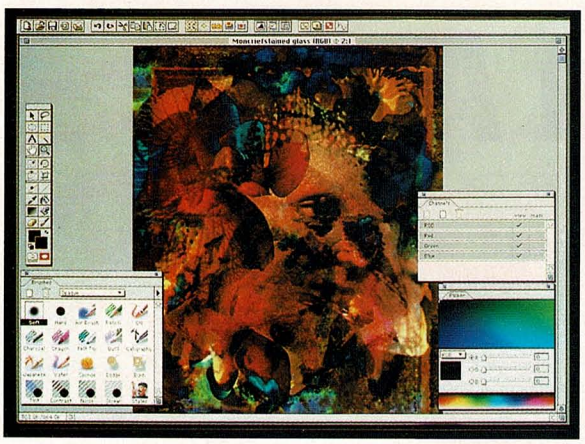
BMUG (the Berkeley Macintosh User Group) offered a Rent-a-Nerd service at the Macworld Expo, where you could get a volunteer guide to show you around the exhibition floor and point out the highlights for you.

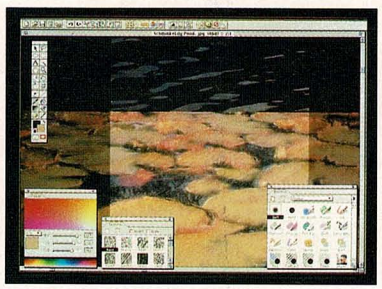
EXPO

Low-cost graphics choice grows









Live Picture (top row) and *xRes* (second row) are two mighty image editing tools for professionals, each of which moves up to a new version. The *xRes* images were made by Judith Moncrief (left) and Karin Schminke (above).

Following the example set by its popular £120 Web design program *PageMill*, Adobe is increasing its selection of low-cost programs, with a simpler version of *Photoshop* for home users, and the return, after a lengthy absence, of *HomePublisher*.

PhotoDeluxe enables you to add your own photographs and pictures to commonly used designs. It takes you step-by-step through creative tasks like making a greetings card or creating a personalised calendar. You're shown how to remove the 'red-eye' effect you often get if your camera uses a flash, and how to sharpen up an image or remove scratches.

You also have access to some of the special effects found in *Photoshop*. That's because the *Photoshop* program lies underneath the super-friendly interface. The price of *PhotoDeluxe* in the United States is around $89, which should mean it will come in at under £100 when it hits the UK.

Once sold by Aldus before the firm was bought by Adobe, *HomePublisher* has been revamped and is now up to version 2.1. The CD-ROM includes the program itself, which you can use to create documents like newsletters, posters and brochures, and also contains more than 50 template designs, 12 fonts and 2,000 clip art pictures.

Designed to be simple to use, *HomePublisher* can automatically fit your text into the space available, create drop caps (the large capital letters at the beginning of articles, as seen in MACFORMAT) and check your spelling. The templates mean you don't have to start a design from scratch.

HomePublisher will go on sale for around $49 in the US, which should result in a price of under £60 over here. It's obviously intended to be an ideal companion to *PhotoDeluxe*. Considering that the Mac is the foremost computer for desktop publishing, the absence over the last few years of a low-cost package for beginners has been bewildering, and it's great that someone has noticed this huge gap in the market at last.

Live Picture plans

Live Picture is a powerful image editing program used by designers, but its maker (also called Live Picture) has ambitious plans to extend its range. It plans to use its distinctive technology in products that appeal to large design studios and advertising agencies at one end of the range, and to the home user at the other.

The flagship *Live Picture* moves up to version 2.5, enabling you to use *Photoshop*-compatible plug-in sub-programs with the program for the first time. You can also now use EPS (Encapsulated PostScript) files in *Live Picture* and use them within the program's own IVUE format – a combination that gives you a lot of versatility but is difficult to get to work.

Coming up later this year is a program codenamed *Shasta*, which will use much of the technology found in *Live Picture*, but will be designed to appeal to a less experienced user. *Shasta* will use new interface ideas to make the program easy to use, including imaginative uses of Apple's drag-and-drop technology (see the *PageMill* review on page 88 for an idea of how the system can be used).

At the other extreme, *Live Picture Network* is due sometime in 1997. It's an entire system installed at once within a studio setup, which enables colleagues to collaborate on images.

xRes improved

Macromedia's latest release is *xRes 2.0*, a revamped version of the image editing program it recently bought from Fauve Software. Like *Live Picture*, *xRes* features technology that enables you to manipulate huge image files (at least 20Mb in size) comparatively quickly. It also has customisable paint brushes and other tools, and can keep any text you use separate from the rest of the picture – so you can still change the wording even after adding complex effects to your image.

And the *FreeHand Graphics Studio* brings together four of Macromedia's most popular packages for a discount price. As well as *FreeHand* and *xRes*, you get *Extreme 3D* and *Fontographer*, giving you a complete graphics setup.

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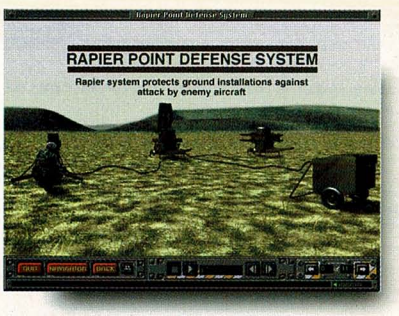

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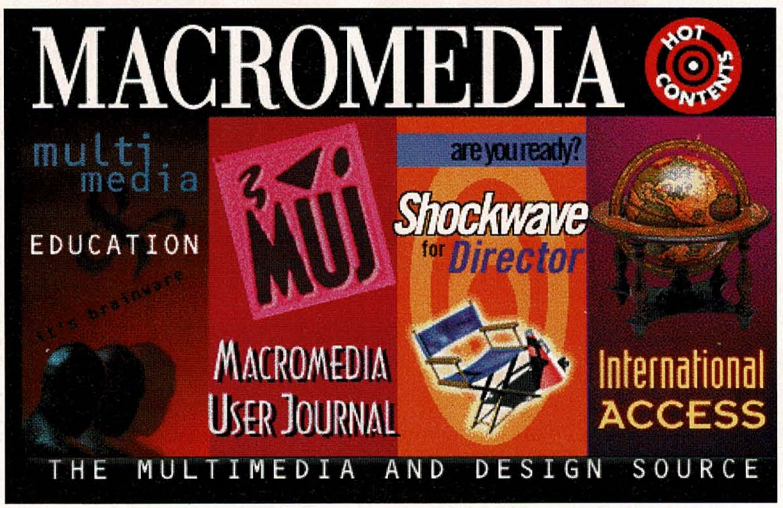
Creativity on the World Wide Web

The Internet seems to have sparked the imaginations of Mac programmers, with all sorts of fresh new programs ready to buy or in the pipeline.

Top of the bill was Apple's *Cyberdog*, the codename for the OpenDoc-based Internet suite. It may not be called *Cyberdog* when it finally appears, because of a dispute over the trademark with a European firm, but the software looks impressive, offering a new approach to the way you use the Net.

Because it uses OpenDoc, *Cyberdog* is actually a set of small programs you can place within a document as you need them. It means you can drop live Internet connections into whatever you're working on – continuous Stock Market reports from the Web into a report, for example.

Macromedia's *Shockwave* brings multimedia to the Web, giving you enhanced areas of graphics as you load a page onto your Mac. You can use one of two different versions of *Shockwave* within the Macromedia programs *Director* and *FreeHand*. Anyone with the *Shockwave* plug-in, which works with *Netscape 2*, can view your work.



Get shocked – this Web page uses Shockwave to give you live animation and sound on the Net.

You can use *Shockwave for Director* to create animation and interactive multimedia, while *Shockwave for FreeHand* enables you to make interactive graphics that you can zoom in on.

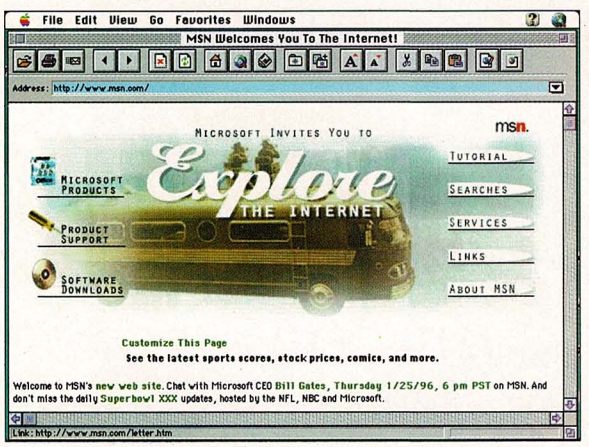
The maker of *SmartSketch* (a drawing program awarded an excellent 89% in MACFORMAT 30) is pursuing a similar idea with its follow-up. FutureWave's *SmartSketch Animator* will enable you to add movement to line drawings, then use a *Netscape* plug-in to put them on a Web page.

Even more ambitious than *Shockwave* is Sun Microsystems' Java, which you can use to create small programs of any sort to run on the Web. Once the program is written, any computer that supports Java will be able to run it. It's still in preparation for the Mac, but you can start writing using Natural Intelligence's *Roaster*. It has features to help you manage your progress while working with this complex language.

Netscape is to get a rival for the position of number one Web browser in the form of Microsoft's *Internet Explorer*, which you can use to view Web pages and read newsgroup debates.

Explore 3D worlds on the Web with *Virtus Voyager*, another new browser that you can use to view pages written in VRML., Virtual Reality Modelling Language describes 3D environments you can walk around.

Finally, you'll soon be able to hold the Web. You just hook up your Newton MessagePad to a portable phone and start up *NetHopper*, a Web browser that displays the text from any page.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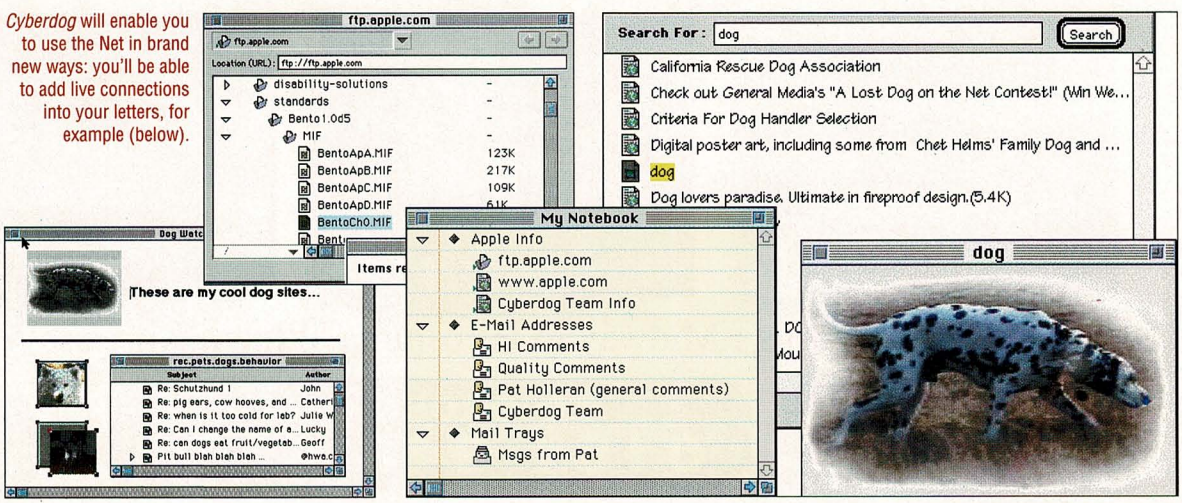
Link: http://www.msn.com/letter.htm

Microsoft's *Internet Explorer* is a new Web browser to help you navigate the Net.

Cyberdog will enable you to use the Net in brand new ways: you'll be able to add live connections into your letters, for example (below).



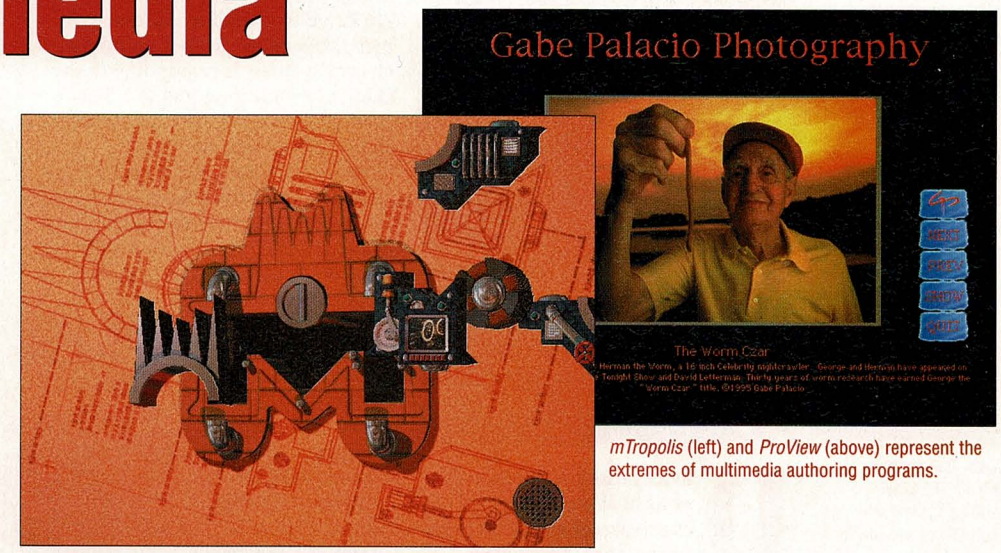
Make your own multimedia

More ways for you to create your own multimedia productions have arrived, and there's something for every level of expertise.

Version 2.0 of *Apple Media Tool* was actually the firm's lead product in a show of few new Apple releases. It's the first program that enables you to build QuickTime VR virtual landscapes into your multimedia, and its interface controls have been revamped to include drag-and-drop capabilities.

mTropolis is the flagship of a projected range of tools from mFactory. It's aimed at the most professional of users, with powerful control systems you can use to create games as well as just the currently typical reference and educational projects.

The intention behind E-magine's *ProView* is to enable designers to make slide shows of their work with the minimum fuss possible, but there are a wide range of potential uses for this accessible program.

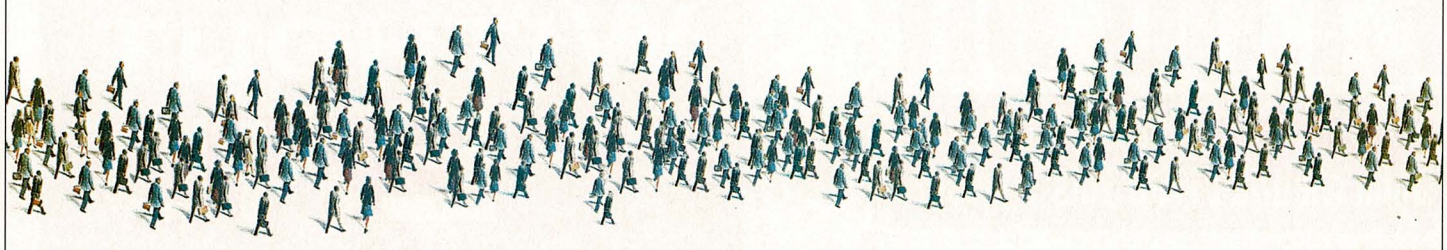


mTropolis (left) and *ProView* (above) represent the extremes of multimedia authoring programs.

And *Hollywood* from the aptly-named Theatrix is multimedia for kids. Put together your own blockbuster, dropping cartoon characters into any of 20 settings, then write a script that your actors are actually able to speak at your command.

Look out for a survey of your multimedia writing options in the next issue of MACFORMAT.

It's the product everyone's been waiting for.



NEWS

EXPO

Easy hardware

Data Translation's Media 100 video editing system now comes in a version for under $5,000.

Devices that add features to your Mac are getting cheaper and more imaginative in their range than ever, as the Expo's selection proved – with storage drives especially setting new standards of excellence.

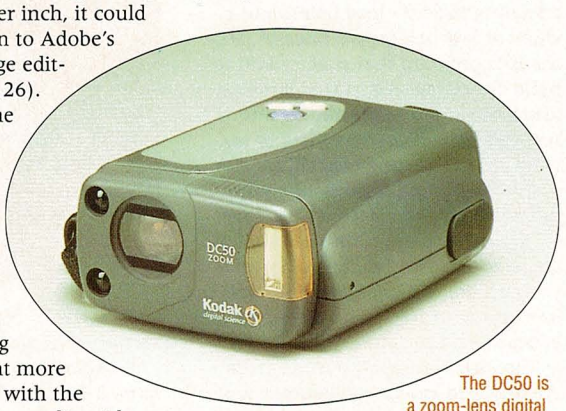
Iomega's massively popular Zip Drive is now joined by the Jaz Drive, with fast cartridges that can store up to 1Gb (1,000Mb) each. Printer firm Epson is also making a version of the Zip Drive to complement Iomega's own. Meanwhile long-time storage champ SyQuest is responding to the challenge with the SyJet, a 1.3Gb drive that can transfer information at a rate of 4Mb a second.

Easy Photo Reader is a scanner you can use to get your photos into your Mac – and it isn't much bigger than a camera itself. Able to scan images at a respectable 600 dots per inch, it could be the ideal companion to Adobe's *PhotoDeluxe* home image editing program (see page 26).

Or you could use one of the new range of digital cameras you can plug into your Mac. Kodak's DC50 features improved picture quality.

The PCI expansion slots built into new PowerMacs are making professional equipment more economical than ever, with the first complete broadcast-quality video editing system for under $5,000 (£3,225) now available. Media 100 qx is a combined hardware and software system that uses QuickTime video to help film-makers and television firms edit their material using Macs.

The Xclaim MM from ATI is a low-cost video system for editing video ready to play on CD-ROMs, even on a PowerMac 7200. It offers video capture, graphics acceleration, a built-in TV tuner and the option of high-quality MPEG video for $300 (£195).



The DC50 is a zoom-lens digital camera that takes electronic images, which you can load into your Mac or onto storage cards.

Cheap laffs

Comedy Review is a new! free! nude! chocolate! national comedy magazine which, should you possess even the vaguest evidence of a **sense of humour,** you will be desperate to own. *Comedy Review* covers every melon-freakin' aspect of comedy, including TV, stand-up, books, films and theatre. It's full-to-death of features, reviews, interviews and... some... other things. But – it's much, **much** more than that. It's £3 but you can, by taking the coupon down there into a branch of WH Smith or John Menzies, get a startling one pound off the first issue. That means you can buy the first issue of a **brilliant new comedy mag** for a **measly two pounds! And not three pounds!** See? Oh, and it's on sale across the country right now.

£1.00 off

Comedy Review at WH Smith and John Menzies With This Voucher

TERMS AND CONDITIONS
1. This voucher entitles you to £1.00 off when you purchase a copy of **Comedy Review** from branches of W H Smith and John Menzies within the UK. 2. Offer exclusive to W H Smith and John Menzies. 3. Not exchangable for cash or any other merchandise. 4. Voucher cannot be combined with any other promotional offer or staff discount. One voucher per purchase. 5. Valid only for issue one.

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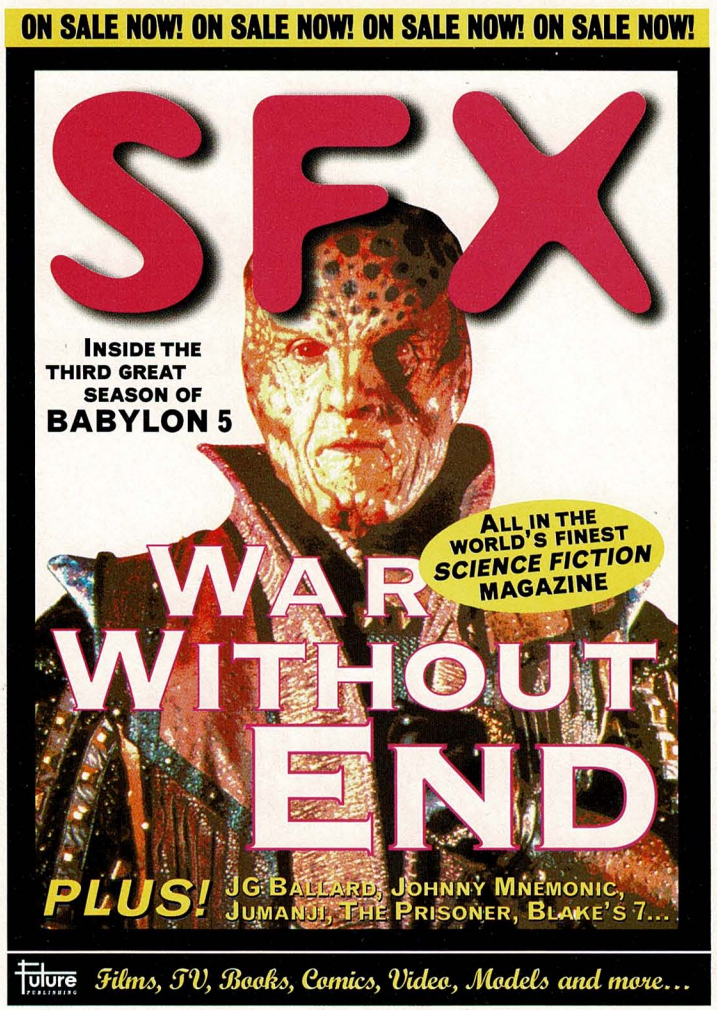
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Mac games get added Power

The growing sales of the PowerMac (now around a million every three months) are encouraging games firms to exploit its speed with a new generation of titles. *Flight Unlimited* is a gorgeous-looking flight simulator, where the thrill lies in mastering the controls, not in destroying enemies. *Flight* uses simulations that have been made as accurate as possible, enabling you to attempt daring moves.

CyberFlix is preparing a trio of titles using its own DreamFactory games creation system. Comic book horror romp *SkullCracker* was announced long ago, but is being completely rewritten to take advantage of improvements in DreamFactory. *Titanic* leaves you stranded on the doomed ship, using the original blueprints to reproduce the settings. And *Red Jack's Revenge* is a stirring pirate adventure.

Zeddas from Synergy plunges you into the deadly Castle Rodvydel as you battle a rogue's gallery of demons – a couple of whom made it to the Expo.

The wicked Domina tempts you into the lair of *Zeddas*, a new adventure. The other baddie had to leave the show early with a slight headache.

And in a dramatic development, it turns out that girls like computers too. A couple of firms are now producing discs aimed at teenage and young girls: *Fashionation!* offers an interactive doll's house and dolls to dress up, while *McKenzie & Co* is the first title from Her Interactive. Hang out with your friends, go down the mall to try on clothes and talk about guys – all across five CD-ROMs of video and pop. **MF**

The winsome Becky, just one of the *McKenzie & Co* gang, looks more innocent, but don't be fooled: she'll destroy your credit rating in one day.

EDU-TOUR

This year's San Francisco Expo was the first where children got their own guided tour of the show – a far cry from the 'no kids' policy of Apple Expo.

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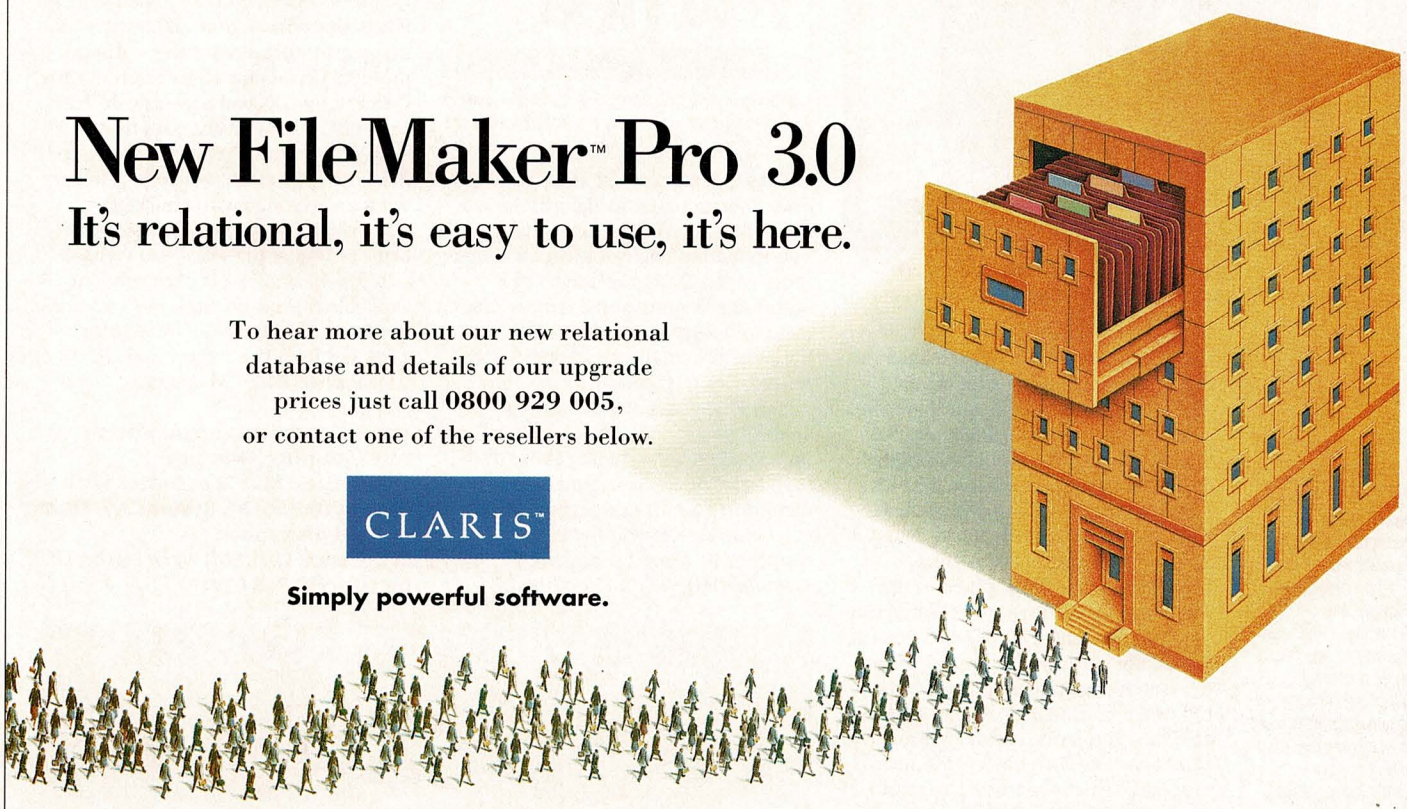

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Mac OS | Designed for Microsoft Windows 95

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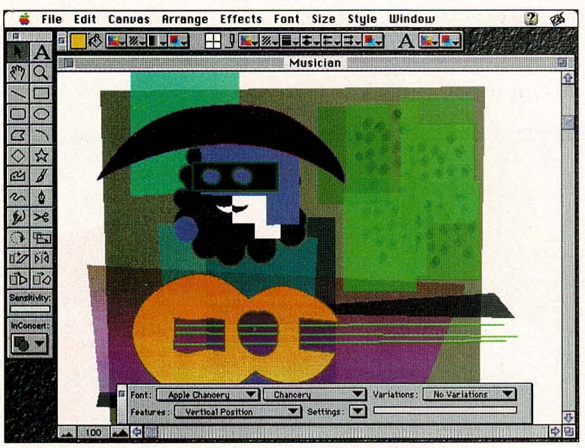
EXPO

WHAT'S NEW

More news of the latest releases direct from the Macworld Expo in San Francisco, from a clever drawing package to programming made easy. Your hosts: Lindsay Bruce and Richard Hill.

LightningDraw GX



LightningDraw GX offers advanced features such as multiple layers and transparent objects, as well as QuickDraw GX's new typographic features.

Lari Software has released the first drawing program to fully exploit Apple's graphics system QuickDraw GX. *LightningDraw GX* takes advantage of QuickDraw GX's extensive graphics and text handling features, such as high resolution printing and a host of creative typographic functions.

LightningDraw GX is aimed at the mid-range drawing market, competing against programs such as *ClarisDraw*. It has all the features you expect from a top-notch drawing program, with a full range of drawing tools, customisable fills, gradients, and fill patterns. *LightningDraw* is an object-orientated program, which means that you can create, move, edit and delete individual shapes at any time without affecting the rest of your drawing.

You can use both TrueType and PostScript fonts with the program, as well as QuickDraw GX fonts. The GX ones give you increased control over the appearance of the font, enabling you to manipulate or distort characters more easily. Design elements like automatic kerning and ligatures, fractions, old-style numerals, flourishes, hanging punctuation and alternative letter styles are built into each font.

For this example, the Font Bureau's Millenium font was used. Millenium's six variation axes (color, contrast, quake, size, weight, width and x-height) were adjusted as desired. The result was then converted into a shape and warped using the Reshaper at medium power.
Millenium Warped
Font: Apple Chancery
Chancery
Variations: No Variations
Features: Vertical Position
Settings:

LightningDraw GX completely distorts text, then you can edit it as you would in a word processor.

Using GX fonts, *LightningDraw* enables you to mix different languages on a single line, including those that read right to left. You can also use text distortion and 3D perspective while still being able to edit the text as simply as in a word processor. *LightningDraw GX* can also import PICT, EPS (Encapsulated PostScript) and *Photoshop* files.

Because *LightningDraw* uses QuickDraw GX, it achieves near-PostScript quality printing on non-PostScript printers. It's here that the program is likely to find appeal with the home user who can't afford an expensive PostScript printer. You will need a GX-savvy printer driver for this – Apple provides drivers for all its printers with QuickDraw GX, and a generic driver is provided, which works with most PostScript printers. You can even save files in a GX format, which you then open on any Mac with QuickDraw GX, even if it doesn't have *LightningDraw* or any of the fonts you've used.

LightningDraw GX is currently only available from the States, but Lari is negotiating with British distributors. Look out for a full review and UK distribution details in MACFORMAT.

- **Price: $99 introductory price, plus shipping. Out: now.**
- **Requires: Mac II or better with 2Mb of free RAM, System 7.5, 3Mb of hard disk space.**
- **Contact: Lari Software in the US on 00 1 919 968 0701.**

JARGON BUSTER

Ligatures are text characters that run together when typed in a certain order. For example, the characters f and i run together to form a single character, fi. Historically, under certain circumstances, ligatures are regarded as being more aesthetically pleasing than single characters.

WHAT IS QUICKDRAW GX?

QuickDraw GX has been around for a while, although it's only recently that many developers have started to provide full support for the technology (see MACFORMAT 33 for news of *UniQorn*, a GX-savvy page layout program). The software improves the quality of printing on non-PostScript printers, and provides a more flexible and useful font format as well as a PDD (Portable Digital Document) format that can be opened, viewed, and printed on any Mac with QuickDraw GX installed. The QuickDraw GX system software comes as part of System 7.5, it's included in the *LightningDraw GX* package, or you can download it from the Internet.

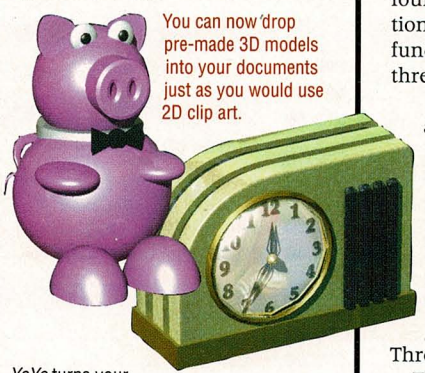
NEW FOR THE MAC

Expo-sure

The best of the rest from January's Macworld Expo – starting with a new spreadsheet, of all things…

C&G Solutions comes from Casady & Greene, seemingly the first firm to have noticed the opportunity offered by the lack of competition to Microsoft's *Excel*. It's a user-friendly spreadsheet, which uses classic Mac features like drag-and-drop to make doing your figures a lot more pleasant. Due this Spring.

Plastic Thought has released the first volume of its *3d-Active* clip art series. It's not just any old clip art either – it's literally 3D. *3d-Active* is a set of models created in QuickDraw 3D and DXF formats, complete with textures to place on their surfaces. Models include classic furniture, household appliances and toys.



You can now drop pre-made 3D models into your documents just as you would use 2D clip art.

YoYo turns your Mac into an automated phone answering system. Connecting the two together, *YoYo* can identify your caller and play different sounds, depending on who it is. If the name's on your list, it'll bring up the person's record from your information manager software. You can also store numbers for rapid calling out.

VocalTec's *Internet Phone* enables you to dial up other people over your Internet connection – as long as they have the same software, which is also available for PCs. If you're only paying for a local call whenever you use the Net, this could potentially save you a fortune…

Logitech's latest replacement devices for your mouse include TrackMan Marble, a silky-smooth trackball you control using only your thumb; Cordless MouseMan, a mouse that works through radio so you can sit six feet away from your Mac; and TrackMan Live, a streamlined radio trackball you can use from up to 30 feet away – handy for presentations.

You can now use Wolfram Research's *Mathematica* software, a powerful scientific calculation system, from within *Microsoft Word*. *Mathematica Link* enables you enter numbers into a *Word* document which are then automatically sent to *Mathematica* to process, with the results reappearing inside *Microsoft Word*.

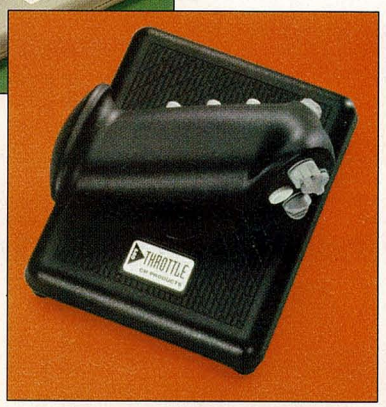
And if you're having trouble keeping track of your Internet use, *DragNet* can help you. It's an address book for Web addresses as well as e-mail contacts and FTP sites.

CH controllers

EXPO

CH Products, the firm behind the FlightStick Pro joystick, has launched a new range of joysticks and control devices for the devoted Mac gamer.

The joystick line-up starts with the basic F-16 FlightStick, which boasts four buttons. For intermediate gamers, the F-16 Combat-Stick offers 14 functions with its five push buttons, two four-way switches and trigger. For the flight sim perfectionist, the F-16 FighterStick is the flagship, offering four gameport functions and 16 programmable functions with four four-way switches, three push buttons and trigger.



CH Products now offers a range of control devices. You may not be able to fit a 747 in your office, but now you don't need to.

Throttle controls are left-handed affairs you use alongside a joystick. The basic CH Throttle features 12 programmable functions using one four-way switch, one two-way switch and no less than six push buttons. The Pro Throttle just gets silly, with four four-way switches and four push buttons. If you have just a standard joystick, the Pro Throttle makes this programmable too.

Thankfully the pedal boards are simpler: the CH Pedals and the Pro Pedals both feature two pedals with toe brakes. The Pro Pedals is the larger of the two boards with the pedals slightly further apart.

CH Products completes the range with two flying yokes you sit on a desk. The Virtual Pilot is the base model with two push buttons, throttle and trim controls. The Virtual Pilot Pro is similar, but has six push buttons and two four-way switches. Makes you sorry you don't have four arms and 12 fingers on each hand…

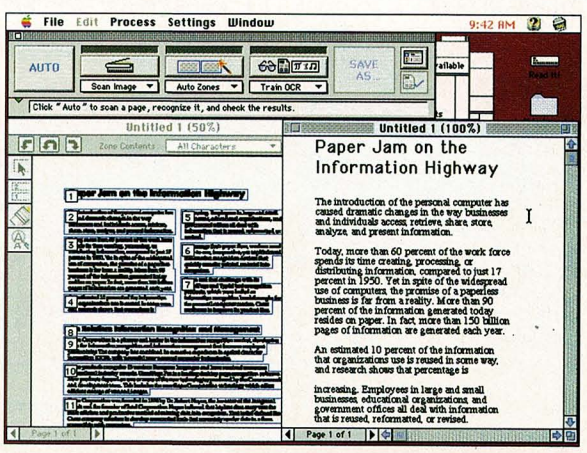
- **Price: TBA. Out: Spring and Summer.**
- **Contact: ISM on 0121 327 4499.**

OmniPage Pro 6.0

Optical character recognition (OCR) heavyweight *OmniPage Pro* is upgraded. Version 6 boasts a number of new features including, most importantly, a new software engine, which developer Caere claims improves the program's accuracy by up to 65%.

Other new features include Apple Guide files that guide you through the OCR process, and Direct Input OCR, which enables you to use the *OmniPage* OCR engine from within your favourite word processor or page layout application. Most impressive is *OmniPage Pro 6's* ability to convert scanned pages of text into HTML (Hyper-Text Markup Language) pages ready for posting on the World Wide Web. The program can even retain a document's layout of text and graphics using its new True Page technology.

- **Price: £699.13. Out: now.**
- **For more details contact Caere on 0171 630 5586.**


File Edit Process Settings Window
9:42 AM
AUTO
Scan Image
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Train OCR
SAVE AS...
Click "Auto" to scan a page, recognize it, and check the results.
Untitled 1 (50%)
Untitled 1 (100%)
Paper Jam on the Information Highway
The introduction of the personal computer has caused dramatic changes in the way businesses and individuals access, retrieve, share, store, analyze, and present information.
Today, more than 60 percent of the work force spends its time creating, processing, or distributing information, compared to just 17 percent in 1950. Yet in spite of the widespread use of computers, the promise of a paperless business is far from a reality. More than 90 percent of the information generated today resides on paper. In fact, more than 150 billion pages of information are generated each year.
An estimated 10 percent of the information that organizations use is reused in some way, and research shows that percentage is increasing. Employees in large and small businesses, educational organizations, and government offices all deal with information that is reused, reformatted, or revised.

Using the latest optical character recognition technology you can scan words straight into HTML.

JARGON BUSTER

Optical Character Recognition is used with a scanner to input pages of printed text. The advantage of OCR over an ordinary scan is that once it's in your Mac, you can then edit the text directly in a word processor.

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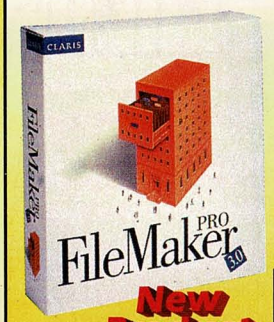

New Product

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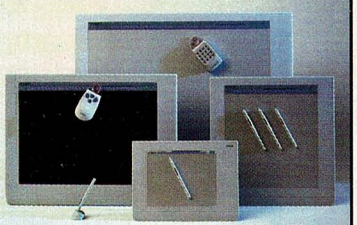
WACOM



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Includes UK power lead, Desktop Mac to SCSI lead and one cartridge

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PageMill

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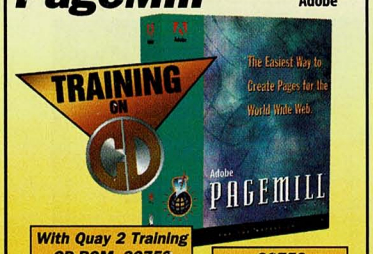

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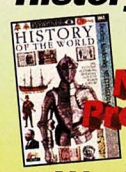
109.95	79.95

Dorling Kindersley

History of the World CD-ROM



New Product

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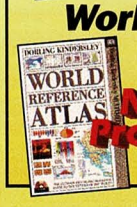

New Product

32911 — 34.95

The Mac Zone Catalogue Nº9 is now available, please call for your free copy.

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8/500 CD, 15" MScan & K/b	2,129.00
16/1GB CD CPU only	2,249.00
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190 cs 4/500	1,449.00
190 cs 8/500	1,649.00

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5300cs 16/750	2,299.00
5300c 8/500	2,449.00
5300c 16/750	2,949.00
5300ce 32/1.1GB	4,499.00

Mac Zone Memory

4MB 72 Pin	89.00
8MB 72 Pin	179.00
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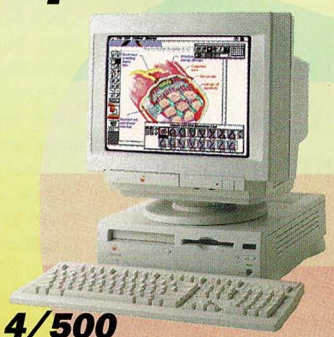

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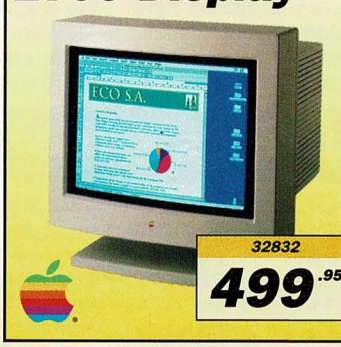

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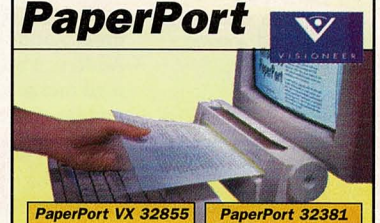

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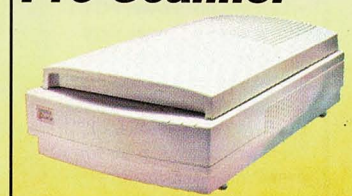

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What is Truth? What is Beauty? What is the point of Windows 95? Write to: Alex Summersby, AppleTalk, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

THE FACT IS...

It's true, I tell you. Every letter and postcard published on these pages wins a MACFORMAT binder. And I can prove it. Just turn to page 115 and order one. Then compare that with the contents of the large, flat, unmarked package you'll find inexplicably on your doorstep some time after your letter is published. Amazing, but true!

Ruminations, observations, cogitations – let us have 'em *and* get a binder in return if your letter is published.

I remember empty fields...

PROBLEMS WITH CLARIS 4

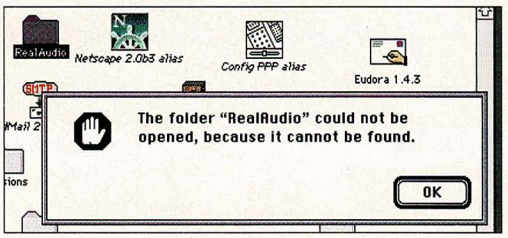
We are real fans of Claris software but our copy of *ClarisWorks 4* went back because of a problem with mail merge. This arises if you have blank fields in a record. *ClarisWorks 4* does not slide the next field up to close the gap, *ClarisWorks 3* did. So if you have a database with (say) fields for Address 1 to Address 5 and some of your records have Address 3 and Address 4 empty, your mail merge has two blank lines in the middle of the address.

Nor can you work around the problem by having one field address formatted with returns, because version 4 does not recognise returns in a field. Claris Support offered a number of fixes, but none of them work with more than one blank field.

For us *ClarisWorks 4* is one step forward, for section commands, and two steps back for an unusable mail merge – a vital function for business users like us.

Theo Triance
Lindfield, West Sussex

Ouch. First it was a reader complaining in MACFORMAT 33 about increased file sizes in ClarisWorks 4, *now this. Anyone got any nice things to say about version 4, or perhaps even any solutions?*



Silly Things Your Mac Says, number 425, from Martin Mayer. I know the Panto season is over now, but for some reason I find I have an overwhelming urge to call out, 'He's behind you!'

Why Windows *is* a problem

BUT ONLY IF THEY BUY IT...

Neil Simpson criticises the fuss about Windows 95 *[MACFORMAT 34]*, but I think what he doesn't realize is that it *does* present a problem to Mac owners. While PC users are buying Windows 95 for their PCs instead of a Macintosh with the Mac OS, fewer Macs are being sold than might otherwise be the case, and in turn the prices of Macs are higher than they might be.

The other reason Mac owners are angry with Windows 95 is the fact that Microsoft copied the Mac OS very poorly and can't come up with an original idea of its own. I find it unbelievable that anyone would want to buy Windows 95 when they can buy a PowerMac and use *SoftWindows* – then you've got the best of both worlds.

For anyone who is interested in Mac evangelism, go see this URL:
http://wais.sensei.com.au/searchform.html
Information on subscribing to their mailing list is there. It's run by Apple fellow Guy Kawasaki and is very good.

Rohan Putter
via FutureNet

On the other hand...

Windows is okay, but a PC?

APPLE HAS AN ANSWER AGAIN

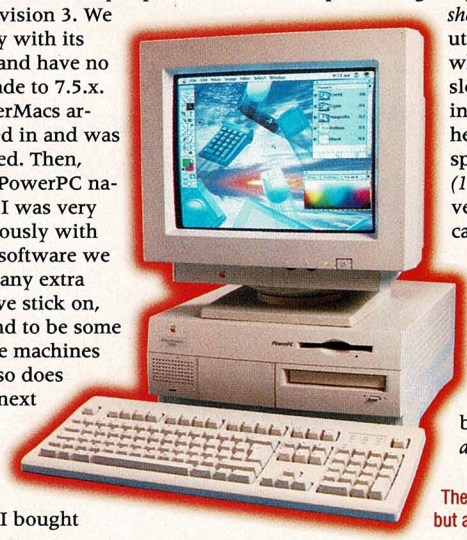
I've just been reading your review of the PowerMac 6100/60 DOS compatible in MACFORMAT 32. I am the happy owner of one of these (or rather, the more recent 6100/66) and I agree with most of what you say. I've installed Windows 95 (and had to invest in a new hard disk: the standard 350Mb was too small, since most of the 100Mb partition I'd reserved for DOS disappeared with Windows 95!) and have to admit it's good, with some nice features. I still prefer the Mac OS, but then I'm used to it. Nevertheless,

PCI MACS – PRETTY CRAP INSIDE?

I am a dedicated Mac user – have been since the very beginning – and I've tried to keep up with Apple, but being cautious at the same time, I didn't go to System 7 until 7.1 was released. All the Macs in my department run under 7.1.2 revision 3. We are very happy with its performance, and have no plans to upgrade to 7.5.x.

When PowerMacs arrived, I jumped in and was nicely surprised. Then, when we got PowerPC native software, I was very pleased. Obviously with the variety of software we use and the many extra utilities that we stick on, there are bound to be some problems – the machines do crash, but so does the PC in the next room.

I was a very happy Maccy chappy. Then I bought a 7200/75 PCI Mac (which is on System 7.5.2). Now I spend much more of my day sorting out clashes, crashes and freezes, and trying to speed the damn thing up! For example, saving a layered 1.5Mb image in *Photoshop* yesterday took over 10 minutes! I've dumped *Speed Doubler*, which has helped with this but slowed down disk access. I've installed *Norton Copy Doubler* to help keep up the file copying speeds, I've dumped *RunShare (1.2)*, I know there's a newer version of *ATM* out there, but can only find it available with *Acrobat* (which I am *not* interested in).



The new PCI Macs – they sound good, but are they all they're cracked up to be?

What dismays me is that everywhere I look I see editorial and advertisements saying that these PCI Macs are the best thing since sliced bread, etc. At the moment, *they are not!* When software 'catches up' with them, they might be, but now they are more like white elephants.

Why can't Apple work with software manufacturers and not release these things until the native software is available? An example: when the 9500 was released – labelled a high-end retouching mac – *Photoshop* wouldn't even work with it! How ridiculous can you get! What planet are these people on? We are *still* awaiting a decent upgrade to *Suitcase* which is PCI compatible. There have been no upgrades that I know of other than *Photoshop 3.0.5* for PCIs, and that is still very slow.

I still love Macs, and would work with them every minute of the day and night if it were possible, but give me a SIMM over a DIMM anyday! PCIs are not for I.

Kevin Thorne
via FutureNet

It's surely a Catch-22: if Apple held back new machines, there wouldn't be a big enough user base for software manufacturers to produce software for... But we did point out some of the problems with PCI Macs in MACFORMAT 32. Apple UK's PowerMac Product Manager replied to some of our comments last issue – order a copy on page 115 if you missed it.

you (and Apple too) missed probably the best feature of this impressive machine: you want *real* 'Plug-and-Play' with Windows? Then look no further – this machine gives it! Printer, CD, fax-modem? No sweat! Maybe Microsoft should dump MS-DOS and license the Mac OS!

John Pritt
Luxembourg, via FutureNet

Microsoft didn't do it, but IBM did – at least for its next generation of machines based on the PowerPC standard. Keep watching our News pages each issue for details.

Not quite so EaZy

TOLD YOU SO

I've recently received, and then returned, one of those new SyQuest EZ135 drive thingies. It was small, neat and probably did exactly what everyone said it would. Unfortunately the large black transformer that came with it definitely wasn't small or neat!

Problem is, I can't remember reading, *anywhere*, that it actually existed, and I didn't notice it in any advertiser's photographs. Could it be that everyone but me failed to notice it when they opened the box? Or is there some magical way of making it work without using that black box, and no one got around to telling me?

Chris Carrick
Bishop Auckland, Co Durham

Actually, we did mention the bulkiness of the EZ135's transformer in our review in MACFORMAT *34. But we still thought its impressive speed, capacity and convenience merited 94% and a Classic award.*

The postman rings once

E-MAIL FOR FREE

In your reply to Nigel J Osborn in Mac Answers in MACFORMAT 30, you suggest that Internet service providers or on-line services are the only way to get Internet e-mail, thus implying that Nigel should pay for all the extra features (news feed etc.) of an ISP, just to get e-mail. This is not true! If you're on a budget or it's just e-mail you want, take a look at some of your local BBSs. Many now provide Internet e-mail for free. (Local library terminals often have lists of local BBSs.)

BTW check out my eight year old sister's home page at:
http://www.luna.co.uk/~chandy/homesite/tiff.html

Chandran Honour
Lunatech Research ('Join us on the edge...'), via FutureNet

We'd be keen to hear from any BBSs offering free e-mail. (But an eight year old with a home page? That I don't *believe.)*

Thanks, but...

SATISFIED CUSTOMER, ALMOST

Thanks for including *Color It!* on MACFORMAT 31's CD – a great bonus. It's great to get software that is complete – will print, save, and do everything it's supposed to do, without demanding shareware fees or expiring after 30 days! Well done!

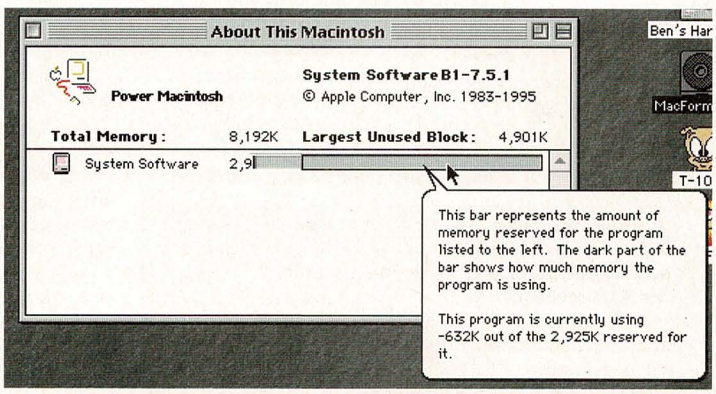
Just one complaint: some of the *Color It!* extensions seem to be corrupted. *Norton* and *DiskFix* complain about 'corrupted resources', and those extensions don't seem to work properly either. The flesh tones, for example, may be flesh – but not as we know it. Will you be distributing corrected versions of those files? And the important question: will you be providing any more great software releases?

Mike Cotterell
via CIX

As we explained in MACFORMAT *33, some of the Convolution files for* Color It! *were indeed damaged as a result of a fault in our CD mastering process. We included replacement versions on issue 33's Cover CD (the earliest opportunity, because of our production lead times). Apologies again for any inconvenience. As for more complete software: next issue is another double-CD special, featuring a* complete *multimedia authoring package. Don't miss it!* **MF**

Two more MACFORMAT binder winners. In our recent RAM upgrade competition, we said multiple entries were not allowed unless attached to SIMMs, hoping that someone would be so desperate to win new RAM as to give us their old. Well, Rod Wolstenholme of Krokelvdalen in Norway took up the challenge. Sadly, he didn't win the RAM, but at least he deserves a binder. The card is from Sandra Weekes of Hallett Cove, South Australia. What is this Aussie fascination with oversized animals? Some weird religious totem thing? Remember, whenever you write to MACFORMAT or enter a competition, an eye-catching postcard could win *you* a binder too!

More Silly Things Your Mac Says, this time from Ben Chapman via e-mail. We've seen things like this and thought it was caused by quirks in memory management or virtual memory or something – but never when there's been no other applications open. Weird. Has your Mac given you a silly message? Grab it by hitting **[command] [shift] 3** and send it to us!


About This Macintosh
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System Software B1-7.5.1
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Total Memory: 8,192K
Largest Unused Block: 4,901K
System Software 2,9
This bar represents the amount of memory reserved for the program listed to the left. The dark part of the bar shows how much memory the program is using.
This program is currently using -632K out of the 2,925K reserved for it.

HOW TO GET IN TOUCH WITH MACFORMAT

- Our address for letters is on the previous page – the shorter your letter, the better its chances of being printed. Longer letters may be published in our regular 'Talking Point' section (overleaf this issue). If you'd like a letter included in 'Readers' Corner' on our CD-ROM, make sure it contains no defamation or obscenity, then send it in as a *TeachText* document on a disk marked 'MACFORMAT Readers' Corner'. Include your name and address, and note that we can't return your disk.
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- The legal bit, since you're still with us: all correspondence sent to our editorial address (by mail or any electronic means) will be considered for publication unless you specifically state otherwise, and we reserve the right to edit published letters for reasons of space, clarity or legality.

The great porn debate

Not as painful as the Spanish Inquisition, nor as much fun as burning witches... MACFORMAT ponders less Christian pursuits.

In MACFORMAT 32, reader Tony Wighton wrote complaining about 'porn' on our Cover CD in the form of a game called *Strip-Mac*. We invited responses.

ALL YOURS!

Unless indicated, the opinions on this page are those of the individual authors, not necessarily those of MACFORMAT or Future Publishing Ltd. If you have something to say, write to 'Talking Point', MACFORMAT, 30 Monmouth Street, Bath, BA1 2BW. ASCII text on a disk would be nice, but isn't essential. You can also e-mail us at **macformat @futurenet.co.uk** – please include 'Talking Point' in the subject line of your message. We reserve the right to sub-edit your letter, but won't alter the sense of any opinions.

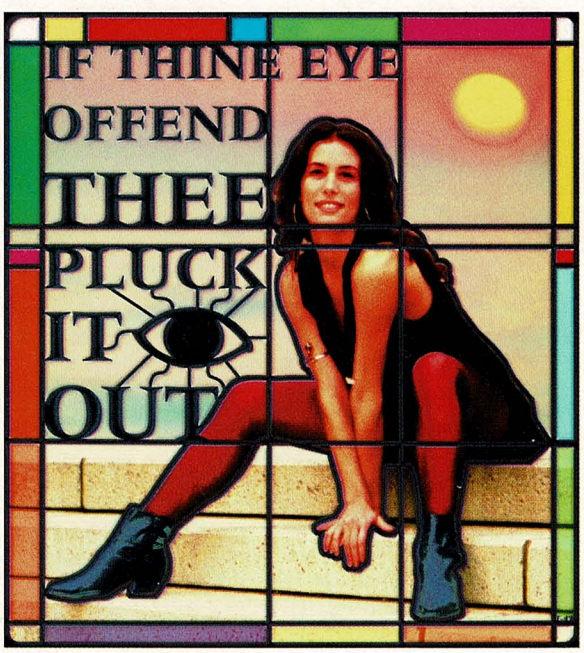
Advocating promiscuity?

AGAINST

I write in support of Tony Wighton, as a subscriber who is also a Christian, a General Practitioner and a parent. I agree with what he says about sex being intended for within marriage, but there being a necessity in a free society for individuals making personal choices. There is clear evidence that premarital promiscuity is linked to post-marital infidelity and marital breakdown. This is in turn associated with an increased risk of a host of social and medical problems, including poor educational attainment and delinquency in children, and depression and suicide in divorcees. For your otherwise superb magazine to publish something advocating promiscuity is thus regrettable.

I have a great time each month going through your CD with my kids, aged 10, 8 and 6. I have in the past also allowed them to spend time browsing through it on their own. Without an assurance that items such as *Strip-Mac* will not in future be included, I will have to stop doing this – which is a great shame, as there is so much good stuff in there.

Dr D A McHardy
Aberdeen



The Devil you know...

FOR

Yes, Mr Wighton, you are a prudish and religious nutter. No, MACFORMAT, you did not step over the mark.

Mr Wighton's remarks remind me all too much of my Catholic (Jesuit boarding school) upbringing in the '50s and '60s, and of the severe psychological damage done there by religious teachings to otherwise sound and healthy pupils.

Concerning AIDS, for instance, maybe Mr Wighton would find it more interesting to read transcripts on CD-ROM of the Pope's Third World lectures, in which he forbids the use of condoms. And what does he think of MTV's display of provocative young ladies, for example in The Grind? Mr Wighton, your children may be watching MTV! Not much of a good role model, either, is it? And what if your kids were reading tabloid literature about the rather libertine behaviour of Britain's rich and famous? More fine role models.

Kids are of course affected by what they see or read. But try your Holy Bible – more than one story of murder and adultery. Readings of the Spanish Inquisition might also be interesting for your children: how to torture and kill in the Holy Name of God. You might also have done a fine job as Witchfinder General a few centuries ago in your Merrie Olde England.

Mr Wighton, there is a fair chance that, given the opportunity, your own children will go surfing for themselves on the Net searching for porn – even if only out of sheer frustration, induced by their oh-so-Christian upbringing.

Keep up the good work, MACFORMAT, and please do keep us informed about whatever software.

Rudolf A de Meter
Belgium

Clean up your act

AGAINST

I agree wholeheartedly with Tony Wighton and others who are urging you to clean up your act and desist from imposing puerile sexual nonsense on your readers. Most of us have no need for vicarious thrills when we are at the computer, and if we do want them, the Mac is not the place we would want to look for them. After all, there are other magazines that specialise in that sort of thing.

I regard my Mac as a clean area – a refuge from the commercial sleaze that drips off the top shelf of the newsagent or gushes from the television when it's switched on. The Mac is also a family affair; I want to let my children browse your Cover CD without worrying about what they might find. If you persist in pandering to pathetic adolescent obsessions I, and no doubt others, will change our Mac magazine buying habits.

And, by the way, I'm not sure where the pleasure lies in rubbishing Christians as if they were a bunch of weirdos without a valid point of view. In the past, their ideas have done a good job of protecting the more vulnerable parts of society (such as children) from all kinds of undesirable abuse. Your tone towards them seems incredibly cheap.

Kim Traynor
Edinburgh

Just for the record: nothing we have published was intended to denigrate Christians or Christianity. I happen to be a Christian myself – but that does not mean I have to be 'fundamentalist' or puritanical.

It's just wrong

AGAINST

No doubt you've had many more letters like mine regarding porn in various guises being put onto your Cover Disks and CDs, such as *Voyeur* and *Strip-Mac*. Doesn't it bother you that children also buy your magazines?

It is totally wrong to thrust porn, either mild, soft or whatever, into the homes of unsuspecting customers who decide to buy your magazine – people who, in the main, would be too embarrassed to deliberately buy it, or may even be totally against it and very offended when they find it on the disk.

I have written to Watchdog too, and they are going to look into *all* the computer magazine business. The only way to stop you people is at square one – by doing random searches and literally threatening to close businesses down if any form of porn is found – or reported to be – on Cover Disks and CDs. Are you prepared to risk closure?

S Roberts
Northampton

Well, yes, in principle. But in reality, sorry, I can't see much risk of that. You seem to be tarring MACFORMAT *with a very broad brush – exactly who are these 'people' that we are one of? We are very conscious that* MACFORMAT *is read by a wide audience, and actually decided not to include* Voyeur *at all because we felt it did step over the mark. Is* Strip-Mac *in the same league? Is it really 'porn' at all, in any meaningful sense of the word?* **ALEX SUMMERSBY**

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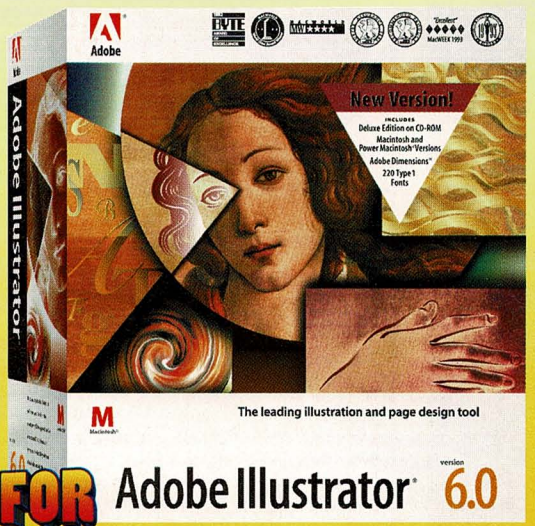

NEW FOR 96

New Functions and Features

- *Photoshop-compatible Plug-ins supported for use on bitmap images*
- *Drag and drop copying between Adobe Illustrator 6.0 and Adobe Photoshop 3.04 or later*
- *Colouring of monochrome TIFFs*
- *Completely rewritten Plug-in architecture*
- *Filter functions reorganised into menus and tool boxes*
- *Rasteriser to convert vector art into pixel images*
- *Direct opening of Adobe Illustrator from Adobe PageMaker*
- *Path Pattern function to apply patterns to paths*
- *Ink Pen allows patterns to be used to define textured fills*
- *Clean Up Artwork eliminates superfluous control points and unpainted objects*
- *Expand changes, gradients and patterns into editable objects*
- *Control palette allows numerical definition of size, position and rotation*
- *Integrated colour separation capability*
- *PostScript Level 1 files can be opened and edited*
- *Addition and subtraction supported in all numerical input fields*

For example, Adobe Illustrator 6.0 offers the most complete support for TIFF and other raster image formats, including Adobe Photoshop-compatible filters and it's all so easy.

Fully integrated and fully supported. Naturally Adobe Illustrator 6.0 integrates with the entire range of Adobe software. Only Adobe offers a complete solution for creating, assembling and delivering work of the highest quality. A solution that includes Adobe PageMaker™, Adobe Photoshop™ and of course, Adobe PostScript™. Which means you can now simply drag-and-drop images from Photoshop to Illustrator and vice versa. The enhanced industry standard Plug-In interface has enabled a host of third-party developers to offer you a whole range of useful palettes and Plug-ins.

The most comprehensive image support around
Not only for TIFF but other raster image formats, including Adobe Photoshop-compatible files.

Cross-product integration with the entire Adobe solution.
Simply Drag and Drop images from Photoshop to and between different Illustrator files and vice versa.

The industry-standard Plug-in interface.
Choose from a vast range of time-saving third-party Plug-ins including Kai's Power Tools.

Over 30 new tools, filters and palettes.
Tools like Star, Spiral and Polygon and filters such as Accented Edges, Halftone Screen, Spatter and Sumi-é.

Built-in production capabilities.
Produce view-before-you-print composite colour separations from within the main application, letting you spot potential cropping, positioning or registration problems long before incurring any production costs.

Added value which is worth the upgrade in itself.

Including the Illustrator 6.0 Deluxe CD-ROM packed with

- Collection of fonts
- Clip-art and software
- Adobe Dimensions™ 2.0 and
- Adobe Acrobat™ Reader 2.0.

Quite simply,

the new Adobe Illustrator 6.0 is everything you need for only

Full Product 32917	Upgrade 32918
279.95	99.95

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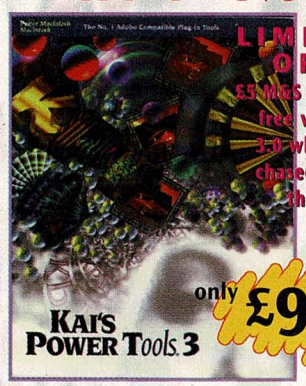
METATOOLS

KPT 3.0



KPT 3.0 is a set of powerful plug-ins for Photoshop, Painter and other programs that use Adobe's plug-in technology. KPT significantly expands the ability to create computer-generated artwork and manipulate scanned images. Kai's Power Tools featured filters are Gradient Designer, Gradients on Paths, Texture Explorer and the Fractal Explorer. KPT includes an advanced color picker, real-time previews, image extraction preview, keypad control and more. No copy of Photoshop should be without it.

WORD PROCESSING

WRD5	**Microsoft Word 6.0** (market leading WP heavyweight)	£265.00
NSWR	**Nisus Writer 4.0** (multiple languages capability)	£99.00
WDP3	**WordPerfect 3.1** (special offer price, ends soon)	£65.00
WRNB	**Write Now 4.0** (fast, includes Correct Grammar)	£45.00

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ACTA	**ACT!** (excellent contact management)	£149.00
CORG	**Claris Organiser** (full featured new database)	£45.00
EXPR	**Expresso** (actual desktop diary for your Mac)	£20.00
FLMK	**FileMaker Pro 2.1** (best flat file, everyone needs it)	£95.00
FOXB	**FoxPro 2.6** (fast DB with great interface, reads dBase)	£85.00
INFG	**InfoGenie** (info organiser, supercedes QuickDex)	£45.00
NOWB	**Now Up-To-Date 3.5 & Now Contact 3.5 Bundle**	£49.00
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PowerBook RAM	call

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QKXZ	**Quark Xpress 3.3** (Power Mac Native version)	£665.00
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ECSH	**Epson Stylus A3** (A3 colour inkjet, non PostScript)	£999.00
BLPEA	**GCC BLP Elite 600** (fast, PostScript, 4Mb, edge to edge)	£1095.00
S600	**GCC SelectPress** (A3 600dpi, edge to edge)	£2995.00
HP34	**HP DeskJet 340** (portable colour inkjet)	£225.00
HP60	**HP DeskWriter 600** (superb new inkjet, Appletalk)	£219.00
HP66	**HP DeskWriter 660C** (colour and mono in one)	£289.00
LBWX	**LabelWriter XL** (mini thermal printer produces labels)	£159.00
MLP6	**Texas MicroLaser Pro** (600dpi A4 PostScript)	£775.00
PWPR	**PowerPrint** (driver and cable for non-Apple printers)	£79.00

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M17V	**Apple 17" 1710 AV Monitor**	£699.00
FR17T	**Formac 17" Trinitron Monitor**	£545.00
RDI20	**Radius IntelliColour 20" Monitor**	£1399.00
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EPSB	**Epson GTX6500** (1200 dpi colour inc P'Shop & O'Page)	£425.00
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MICRONET

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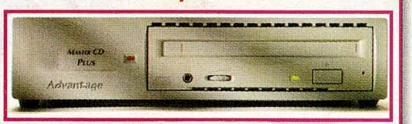

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- archive large image files.
- backup large amounts of data – permanently.
- create CDs to distribute multimedia presentations.

This model includes Toast, the leading CD Writer software package (retail value £699!). It supports drag and drop file selection, has multi-volume and multisession support and while you're not using it to master a CD, you can use it as a normal CD player.

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SPR1	**Sportster FaxModem** (14,400 baud, BABT approved)	£130.00
SPR3	**Sportster FaxModem** (28,800 baud, BABT approved)	£189.00
SPEA	**SupraExpress FaxModem** (quality, low cost 14.4 baud)	£85.00
SPEB	**SupraExpress FaxModem** (quality, low cost 28.8 baud)	£145.00
SPRA	**Supra FaxModem** (top quality, Grp III 28.8 baud)	£185.00
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TLPT	**TelePort Platinum** (28.8 modem from Global Village)	£240.00

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FTNP	**PhoneNet connector kits**	£12.00
FEHA	**EtherLan Hub 9** (9 port ethernet 10baseT Hub)	£125.00
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ASPA	**AsantePrint** (Ethernet to AppleTalk printer router)	£249.00
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MRPHB	**Morph 2.5** (morph from one QuickTime movie to another)	£79.00
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PRMR	**Premiere 4.0** (Adobe's brilliant QuickTime editor)	£399.00
VIDD	**Video Director 2.0** (edit your home videotapes)	£89.00

PC COMPATIBILITY

ACPC	**Access PC 3.0** (read/write PC floppys from your Mac)	£75.00
DSMT	**DOS Mounter Plus** (read/write PC floppys from your Mac)	£55.00
MLPT	**MacLink Pro** (best Mac/PC link with100's translators)	£110.00
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POWERBOOK

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GPCA	**PowerPort Platinum** (PCMCIA 28.8 fax modem)	£449.00

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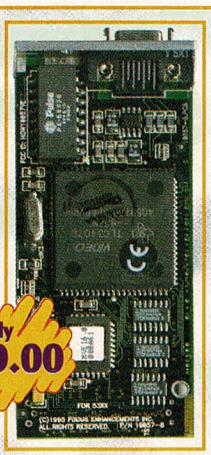

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DOM2	**Doom II** (you may have have heard of this game!)	£35.00
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CDWG	**Metrowerks Code Warrior Gold v7** (PowerMac compiler)	£265.00
ZCP	**Symantec C++** (best object oriented programming tool)	£75.00
THKC	**Think C 6.0** (the leading Mac app development tool)	£185.00
THKP	**Think Pascal 4.0** (excellent developer level compiler)	£165.00
FTBS	**FutureBasic** (the best Basic for Mac, includes PG Pro)	£179.00

ENTERTAINMENT

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10)	LEM3	**Lemmings/Oh No! More Lemmings Bundle**	£22.00
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13)	PLPG	**Links Pro Golf** (so realistic you'll think you're there!!)	£32.00
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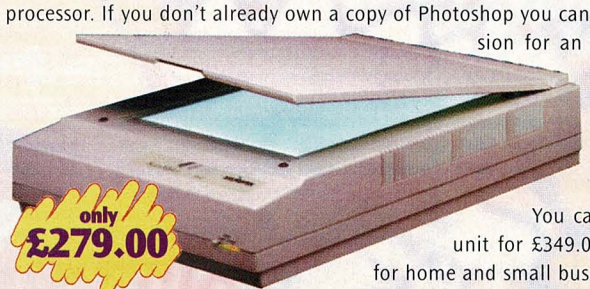

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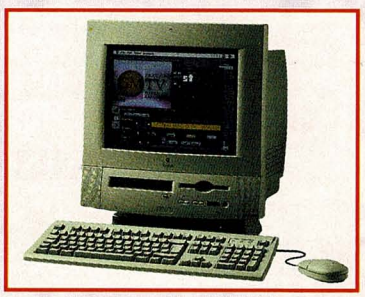

Based around the brand new Power PC 603 chip running at 75MHz, the 5200 combines the CPU, a 15" multiscan monitor and 14.4 modem in one housing. It has a built-in quad speed CD ROM drive and the (optional) TV and video capabilities of the Performa 630. With its 256k cache memory, it is equivalent in speed to a Power Mac 6100 for a lot less. Includes ClarisWorks and optional software bundle.

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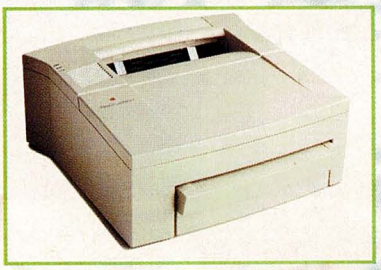

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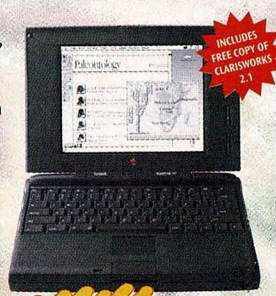

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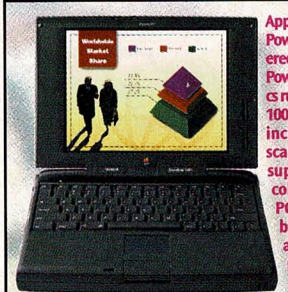

Apple's latest PowerBooks are powered by a 603e PowerPC processor, the cs running at a blinding 100Mhz. It has a 10.4 inch backlit dual scan colour screen supporting 256 colours, a slot for PCMCIA cards, 16 bit stereo sound and built in infra red technology supporting LocalTalk - so you can have wireless data transfer between PowerBooks and infra red equiped Macs.

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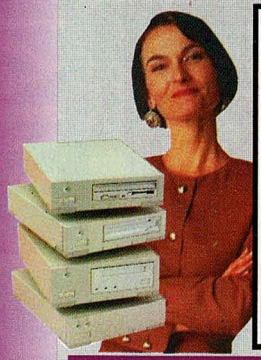

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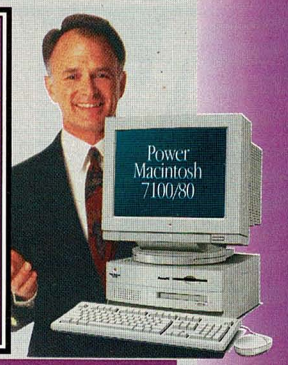

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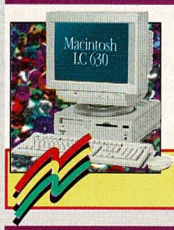

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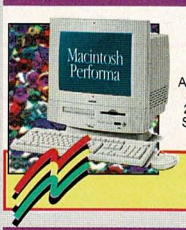

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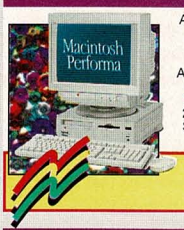

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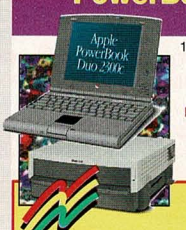
CPU only price.
Don't forget to add the cost of a Monitor and Keyboard.

£1739

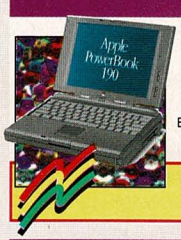
PowerBook 2300c Duo Dock



100MHz PowerPC 603e
8Mb RAM.
700Mb HardDrive.
9.5" Colour Matrix.
Mobility Bundle.
PowerBook only price.
Add the cost of the Docking station.
Duo Dock Plus £629.
Duo Dock II £685.

£2389

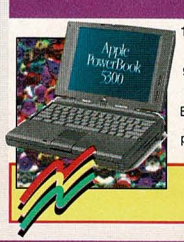
PowerBook 190 4/500



66Mhz 040 Processor.
4Mb RAM.
500Mb HardDrive.
512k VRAM.
9.5" Greyscale Matrix.
Software Bundle: -
Mobility bundle.
Entertainment Software,
Route 66 and
ClarisWorks.

£1059

PowerBook 5300 8/500

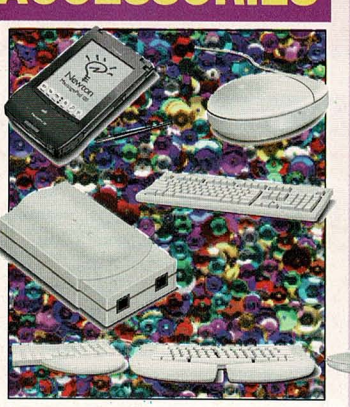


100MHz PowerPC 603e
8Mb RAM.
500Mb HardDrive.
9.5" Greyscale Display.
Software Bundle: -
Mobility Bundle.
Entertainment Software,
E.World, Password
protection software and
Floppy Disk Maker.

£1449

UPGRADES & ACCESSORIES

Apple Design Keyboard	£79
Apple Extended Keyboard II	£135
Apple Ajustable Keyboard	£159
Mouse II Desktop	£35
Apple MIDI Interface	£49
Apple Design Speakers	£49
PlainTalk Microphone	£19
Video in Card (LC630)	£85
Vidoe in & TV Tuner (LC630)	£199
QuickTake 150 Camera	£379
GeoPort Adaptor	£89
25-50 SCSI Cable	£10
50-50 SCSI Cable	£10
Terminator	£10
Ethernet Transceiver	£35
CALL FOR PRODUCTS NOT LISTED	



Equipment, prices and backup that make Technology Matrix the preferred supplier

Payment Cards Welcome

NO SURCHARGE Access
NO SURCHARGE VISA
NO SURCHARGE AMERICAN EXPRESS
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Technology Matrix Hot Line 0161 320 0000

89a Stockport Road, Denton Manchester M34 6DD. Fax: 0161 320 3210

One Stop Storage

One Stop Storage

ARE YOU BEING SERVED?

When you're buying a Mac, or Mac-related products, what kind of advice, service and after-sales support should you expect? Richard Wentk investigates.

There's never been a better time to buy a Mac. The latest Power Macintoshes are the fastest personal computers ever made, with every Mac in the range representing truly excellent value for money, and the range of software available for them growing by leaps and bounds.

Computer buyers around the world seem to agree with this, and more Macintoshes are being sold than ever before. But with the boom have come some awkward questions. You can now buy Macs from a wide range of sources, but do they all offer adequate advice before you buy, and competent support afterwards? Apple built and shipped more Macs in 1995 than at any other time in its 20-year history, but does it have the resources to back them up and sustain a commitment to its customers?

Macs invariably appear near the top of any computer reliability (or, for that matter, customer satisfaction) survey, but if something does go wrong, can you get help?

In short, exactly what can Apple customers expect today (or even tomorrow)? Over the next seven pages we take a look at some real-world experiences with Apple products. Some stories are good, some not so good. But if you're thinking of buying a Mac, or have just bought one, you deserve to know just how well Apple, its dealer network and the wider computer industry are looking after their customers...

Continued on next page

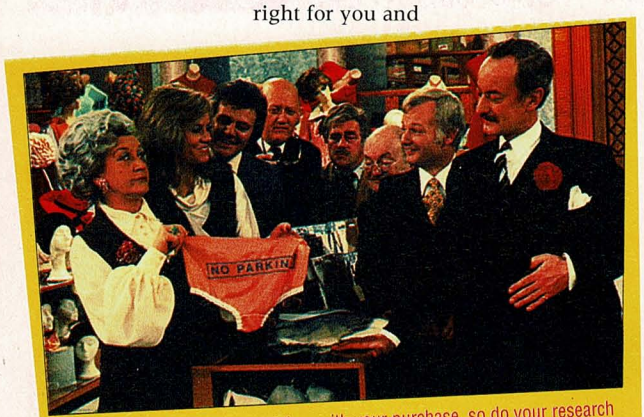
WHO IS RICHARD?

Richard Wentk is an independent freelance writer, computer trainer and consultant. He is author of *The Which? Guide to Computers* (ISBN 0 85202 596 3), published by the Consumers' Association and available at bookshops everywhere.

BUYER BEWARE

How easy is it to buy a Macintosh today? Our intrepid reporter donned his best anorak and went looking for help and advice. Here's what he found.

When you're thinking of buying a Macintosh, where exactly can you go for advice? Who should you buy from? Magazines like MACFORMAT can give you guidance on what to look for and which products are worth buying, and the adverts can inform you about the latest new releases and current prices, but how do you decide what's right for you and where to go when you want to buy it? What should you look out for?



You may have to spend a lot of time with your purchase, so do your research first to make sure that what you're considering is really right for your needs.

Our first step was to phone Apple's own Freefone enquiry number, 0800 127753. The call was answered promptly, and a friendly and helpful voice told me that the number was really only a brochure line. If I wanted more detailed help I should call the Apple technical support number – which of course wasn't free – or my local Apple reseller, whose number I was given. It was suggested that the Apple line would be the better choice – a seller would immediately try to sell me something.

I tried the number I'd been given, waded through a maze of touch-tone operated menus and waited. The online Debussy and Satie hold music were very pleasant, but after 20 minutes of waiting during peak hours I gave up. It may have been the best route, but it looked like becoming the most expensive too.

'I'M FREE...'

Next port of call was a larger branch of Dixons. In among a cluster of PCs on display the store had a single Performa. Unlike the PCs, it wasn't turned on – apparently it had hardware problems, which wasn't an impressive start. Posing as someone who worked with graphics and had an old PC to replace, I eventually attracted a sales person and got him to go through his patter. Apart from a few howlers (such as a mention of an entirely fictitious Windows 96, 'which is due out soon') most of the information was surprisingly accurate. Even the video grabbing facility got a mention. Although I obviously wasn't dealing with an expert – apparently the expert had gone back to university a week or so before – the Mac got some very complimentary comments, and I even managed to get a technical support number.

Software? No, Dixons doesn't sell Mac software, although there was a big bundle of software that came with the machine, which did... uh... well, it was good anyway. Otherwise, as far as software was concerned, I was on my own. On the other hand, because the store was due to be renovated soon I could get a 10% discount off the ticket price of £1,299 – if I moved fast.

'YOU'VE ALL DONE VERY WELL'

Next stop was a nearby Apple Business Centre. The office – it was hardly a shop – was clearly run by and for professionals. Unfortunately most of the sales people were off on a course, so I waited about 15 minutes, free cup of coffee in hand, before the sales manager appeared. She was a loud, enthusiastic and intelligent woman, who started off by asking searching questions about how serious I was ('We don't like to give free advice away; that's not how we do business') and eventually pointed me at a Performa 630. Prices were higher than at Dixons, but then I'd be paying for the support. There were brochures for all the major packages on hand ('...and this is *Photoshop*, which is just astounding...'). The company also had its own consultants, including one graphics

WHY BUY WHEN YOU CAN RENT?

It's now all but impossible to rent a Mac as a private individual from any of the major rental companies. According to Sue Elias from MicroRent (0171 700 4848), the rental companies were losing thousands upon thousands of pounds to people who rented, then moved, taking the machine with them. You now have to prove you're a low risk, and provide bank references, trade references, and preferably a company registration number.

If you're a business, what are the advantages? Cost certainly isn't one of them. MicroRent's current rate for a Performa 6200 8/500 without a CD-ROM drive or any free software is £97.50 per month, and that's for a guaranteed 12 month rental period – rent it for a shorter time and you pay more.

On the other hand, MicroRent claims to have 95% of all hardware problems fixed within eight hours. To some extent this depends on location – customers in Edinburgh may have to wait slightly longer. But if you rent you should at least be getting the peace of mind of knowing your machine works. There's also a 'hire-to-acquire' scheme – if you like the kit, you can buy it outright and MicroRent rebates 'most of the rental cost'.

What about software support? MicroRent supports Microsoft products – and that's it. If you're a *Nisus* or even *Quark* fan, this clearly isn't the approach for you. All told, renting is a good bet for companies who need guaranteed hardware performance, but for the home user it's not a cost-effective option.

For home users, Granada – more familiar as the TV and video rental people – run their own 'option to buy' scheme which is all but indistinguishable from a rental deal. You get a choice of machine for a fixed monthly payment over 38 months (see the table below), and at the end of the period the computer is yours – although you can swap it for a new model after one year. Included in the price are a hardware support service with a call-out time of 24 hours (this isn't guaranteed, unfortunately), and access to a software help desk. VAT and delivery are also included, but a £10 'administrative setup fee' is extra.

From the prices it's obvious this is really just another hire purchase deal, with some basic support thrown in. The fax/modem option is a rip-off – you'll end up paying £304 for a fax/modem when you can easily buy one outright for less than half that. The other prices are about average for HP – on the high side compared to other kinds of finance, but not quite extortionate.

One problem with the scheme is that only a few Granada stores currently have the necessary paper-work, so if you're interested you'll have to book an appointment with your local store and give them plenty of notice. Another problem is that it's not very well advertised. A couple of local Granada stores had no idea that they were able to rent Apple machines at all. Full details are available from Granada's direct line service on 0800 581143.

Great service, great sets? Granada's price list

These are the amounts you pay per month, for 38 months, for the machine indicated:

Performa 6200	£54.99
Performa 6200 with fax modem	£62.99
Performa 5200	£72.99
StyleWriter 2400 printer	£39.99

Supplied software:
The package includes System 7.5, *ClarisWorks*, At Ease and 'a selection of other basic word processing and graphics packages'.

and design specialist, who were on call to answer questions.

Most of the information was spot on – the one glaring error was PC related, which is perhaps understandable. Before I left the sales manager suggested that I do plenty of research – a *very* good bit of advice – and warned me off one particular UK Mac user's magazine in no uncertain terms: 'They're owned by a grey import company, which I disapprove of.' (More of a comment on dealers' attitudes to grey importers, arguably, than a considered assessment of any magazine!) The US edition of another Mac magazine came in for fulsome praise. MACFORMAT was summed up with 'You won't go far wrong with it,' followed by the story of how a customer had tried to apply some of the tips from the recent 'Twenty ways to speed up your Mac' feature [MACFORMAT 31], and had wiped her hard disk – which of course wasn't backed up. Oh well.

If you're not sure what you want or need advice, there's no substitute for the personal touch.

'HAS ANYONE SEEN MY PUSSY?'

So, what about mail order? (In the UK, mail order is certainly the major source of Mac software and at least one of the most popular sources for hardware.) Phone in hand, I tried one of the more garishly colourful Mac advertisers. I explained that I was a writer with an old PC that needed replacing, and my girlfriend was a graphic designer. Between us we had about £1,500 to spend. A Performa 630 was suggested as the best package again: 'It has a Mac chip and not a PowerPC chip, so it's quite a bit slower.' The price was rather high once the monitor and keyboard were included.

Word processing? *'ClarisWorks* – that's a word processor, and it comes free with it.' Graphics? *'QuarkXPress* – that's one of the best graphics packages around.' After a brief hint away from the direction of DTP, *FreeHand* and *Illustrator* got a mention, as did plug-ins, text objects, *Kai's Power Tools*, *Photoshop*, and a lot of other big words that would have left a true Mac novice confused and floundering. If I hadn't suggested a hands-on session, I could have well have been sold something completely unsuitable, sight unseen.

Support? 'Everything is warranted by Apple itself – a full return-to-base service with an upgrade to on-site for £12.50. And service engineers support all the software sold.'

So far so good, but it was obvious the sales person couldn't really remember what being a novice user is like. Jargon was flying thick and fast, and any attempt to stop the flow was met with confusion. In short, the information was sketchy and customer empathy was all but non-existent.

The final verdict? Well, it depends very much on how much you can understand to begin with, and whether you already know what you want. If you're a serious user and you need professional backup, go to a good Apple Business Centre – the support is likely to be worth the extra cost to you. If, on the other hand, you're on a tight budget, then mail order may well be cheapest, but make sure you shop around – and as well as the high street electrical shops like Dixons and Comet, don't forget Argos. If you buy cheap, don't expect world-class support, because you almost certainly won't get it. However you buy, do your research first – lots of it. It can save you a fortune in the long run.

If you choose to buy a Mac from a high street store, bear in mind that the staff might not understand quite as much about Macs as specialist sellers.

Continued on next page

EXPENSIVE? WELL, ACTUALLY...

Macs are traditionally seen as being more expensive than PCs. Well, maybe that old adage was true once, but it certainly isn't true today – either for hardware or software. The price you pay will vary, depending on where you buy, but here are some typical street prices for various Mac and PC products and systems, including VAT.

Software

	Illustrator 4.1	*QuarkXPress*	*Photoshop*	*FreeHand*	*Excel*	*ClarisWorks*
PC	£340	£646	£452	£364	£265	£104
Mac	£300	£739	£346	£364	£264	£104

(All prices are as of January 1996, quoted over the phone by large mail order houses. All products were available ex-stock.)

Hardware

Performa 6200 8/500 with CD-ROM, digital sound and video hardware	£1,100
Pentium 100 8/500 basic PC system from a budget mail order dealer	£1,100
Pentium 100 system with multimedia extras	£1,700

Prices from 'high end' dealers – the kind you'll see advertising in the major PC monthlies – are likely to come to well over £2,000 for an equivalent multimedia PC system. And with a 75MHz PowerPC RISC processor, the Performa 6200 is likely to be significantly more productive for real tasks than the Pentium 100-based machine. The same differential would apply across the Mac range.

'LOVELY COMPUTER, THAT – ONLY 63,000 MILES...'

If a new Mac is out of your reach, how about a second-hand model? It may look like an ideal solution, but it has its dangers. If you buy privately, and the Mac develops a fault, you have no comeback. You may be entitled to sue if the Mac was misdescribed – say, the seller claimed it has 32Mb of RAM when really it had 8Mb – but otherwise you're on your own.

Software is another tricky area. If you buy second-hand, you almost certainly won't be eligible for any free support from the software company – the warranty is usually not transferable. In some cases, because of the legal small print in some licensing schemes, you're not entitled to use the software at all!

The upside is that second-hand equipment is cheaper. If you want a PowerBook for portable note-taking and word processing, then one of the latest PowerPC models is overkill. An old black and white PowerBook Duo may fit the bill much better.

To get the best from buying second-hand, look at your needs carefully. For games, or any kind of more intensive use, you'll need the best hardware you can afford, and an old LCIII – even though it's still a good computer – just won't be up to the task. If, however, you simply want to write letters and do your accounts, it can be the perfect solution. There are people – including some here at Future Publishing – who get plenty of work done with a Mac Classic. As ever, consider what you need, shop around (MACFORMAT's free reader ads section is a good place to start, then possibly a local advertising paper like *Loot*, *Trade-It* or *Exchange & Mart)* and then decide.

SERVICE FOR ALL?

How good is Apple's service network? And just how good are its dealers? What sort of service can you expect? The news isn't as good as it might be.

Surveys of computer users consistently show that Mac owners are on the whole very happy with their machines (in survey-speak, there's a high level of customer satisfaction and consequent brand loyalty). Macs are more reliable than PCs overall, and they cost less to support. But even if problems are rare, what kind of backup can you expect if you're unlucky and things do go horribly wrong?

For a small fee you can upgrade Apple's standard warranty to on-site service by skilled personnel.

Apple's Business Centres can be a good source of both hardware and software support, although of course all this comes extra. According to some dealers, Apple's margins are wafer thin, and it's only the provision of support that keeps these centres afloat. (Apple's financial troubles lend weight to this view. Despite selling more Macs than ever before, Apple Computer made a huge loss in the last financial quarter, attributable to the depth of its recent price cuts. A year ago the company made almost twice as much on each Mac as it does now. A rock-bottom price is great news if you're buying a Mac, but it does tend to put areas like the sales and support network at risk. See this issue's News pages for more details.)

Down at the lower end of the market, things are much rougher than this. A handful of dealers are definitely being less than scrupulous, and the previously pristine waters are being muddied by their shady and dubious business practices. A couple of years ago you could only buy Macs from Apple's own dealers, but it's worth remembering that Apple no longer has any say about who sells its products, or about the support that dealers should, or shouldn't, offer.

JUST DANGLE IT OUT THE WINDOW

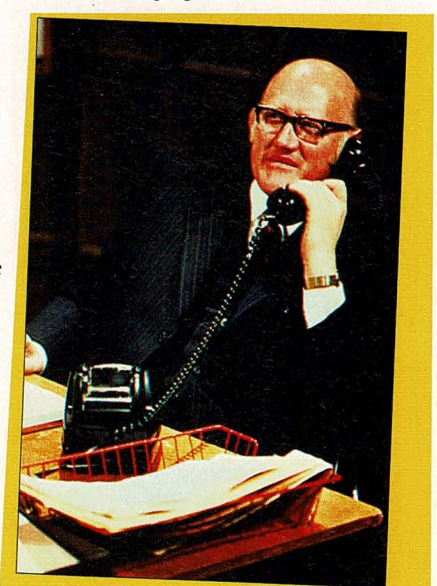
Apple's own service and support aims are quite clear. According to Customer Support Manager Paul Vernon, Apple supplies a one year back-to-base warranty with every product sold. It's a global policy, which means that you can take any Apple product back for repair to any Apple dealer in the world. You can upgrade this to a full on-site warranty called Apple Premium Care for varying amounts. Although Apple charges £12.34, some dealers offer the same service for three or four times the price, while others write it off in their margins. On-site service is sub-contracted to 'your local Apple Authorised Service Provider', often a specialist service company.

With an average repair time of three and a half days, this service is clearly aimed at home rather than business users. If you want a more professional service contract, you can contact any of Apple's 135 service centres – according to Vernon, they will be happy to negotiate with users and businesses.

Previously Apple has been criticised for its apparent no-swap policy. If a machine is having problems, Apple engineers have sometimes spent weeks replacing components rather than taking back your Mac and leaving you with a new working machine. Officially Apple will swap a machine in the first 14 days, if the customer demands it. After that period it prefers to replace parts, although if it takes four or five visits this is allegedly reconsidered. Clearly, users who are having problems with ineffectual repairs should make as much fuss as possible.

For novices, Apple's support includes the Apple Assistance scheme, where anything with a mains plug is eligible for 90 days free technical support. According to Vernon, 'We will get beginners up and running, but we won't teach users how to write *Excel* macros.' Seems fair enough... except that the support is on Apple's technical support line, which is notoriously difficult to get through to.

Vernon acknowledges, 'We have to accept that we have an issue there, and we're trying to fix it. We forecast our sales in advance, and we have not been good at that. Plus there have been some technical teething troubles – it's a very advanced system. And of course, over 60% of our callers are dealing with software problems that



With telephone support from Apple or software houses, help can be just a phone call away.

A DEALER SPEAKS OUT

Steve Kyte is MD of Mac Rapide, a company specialising in hardware, upgrades and support, and has been in the business for over a decade. He has some interesting observations about Mac sales, service and support.

'The places that bother me most are the ones that advertise incredibly low prices, and when you phone up they're never in stock,' he says. 'There was one item where someone phoned us and said a competing dealer was selling them for a silly price. I just said "Fine, can you order us half a dozen?" I think it's deceiving and very wrong – of course they do it just so they get the call, and once you're there they can sell you something else.

'With service, some places just ask you to take up problems with the manufacturers. They don't care at all. If we get a lot of one line back, we discontinue it, but I know of dealers that keep selling it regardless.

'If there's one thing people really don't know enough about in this country, it's SIMMs [memory chips]. People buy really cheap SIMMs, then find they don't work. Some guys are doing mail order from their bedrooms. You don't know where they've been – if they're second-hand or what. Some places won't replace SIMMs if they go wrong – they say it's your fault for touching them.

'On the whole, though, there isn't a problem. Apple faxes its dealers each week with a report, and apparently the backlogs of the high end Macs will be clear by the Spring. It could still improve its marketing though. If more people knew about Macs, they'd buy them. It's just a much nicer machine than a PC – Windows 95 doesn't offer anything that the Mac OS doesn't, and it doesn't even do it as well – and the multimedia is so much better.'

No matter how unusual your problem, the experts have probably heard about it before and can help.

aren't really anything to do with us. We are open 12 hours – 8 till 8 – and the peak times are roughly 10 to 12 and 3.30 to 4.30, so if people try outside those peak times, they're more likely to get through. It's also very helpful if they have their customer number ready. Meanwhile, we're looking at adding more resources, but there's always a cost constraint. Plus, we're considering other ways of getting support to customers, such as eWorld and the Internet. But we are tackling the problem.'

And customer complaints? These should be directed to Apple's Customer Enquiries department, which investigates complaints against dealers. Letters and faxes are treated with greater urgency than phone calls.

Support is an art as much as a science – make sure the service source understands the product.

Straight to the Source

The Apple Assistance Centre offers you a direct line to Apple for advice before you buy, and support afterwards (a year for Performas, 90 days from the date of purchase for most Mac products and peripherals).

You can write to Apple Assistance Centre, PO Box 763, Slough, Berkshire SL1 1YQ, phone 01753 615999, or fax 01753 537302.

The services available include:

- Performa/90 day support (8am – 8pm). Free for 90 days after you buy any Mac hardware.
- MacHelpline (8am – 8pm). For £112 a year, you get in-depth support on any Mac system hardware or the top ten programs (*Word, Excel, PowerPoint, ClarisWorks, FileMaker Pro, MacWrite Pro, QuarkXPress, PageMaker...* and yes, we know that's only eight, but that's the list Apple provided!).
- AppleCare Premium Support (9am – 5.30pm). Advises about the Apple warranty upgrade, and offers an easy way to register for it. (As well as upgrading Apple's standard 12-month return-to-base warranty to an on-site service, you can also extend the warranty by up to two further years – ask for details.)
- Hardware Support (9am – 5pm). If you've paid for AppleCare Premium.
- eWorld Support (9am – 8pm). Free for all eWorld customers; a free eWorld starter pack is also available.
- Newton Support (8am – 8pm). Free for a year after you buy your Newton.

Other, non-telephone services:

- World Wide Web pages for quick reference and answers to common technical questions are at
  http://www.apple.com/
  http://www.euro.apple.com/
- Tech Info Library on AppleLink and eWorld, if you subscribe to either.
- Fax on demand. Both 'pre and post sale' fact sheets are available, free except for the cost of the request call. The sheets include tech specs and ordering information on UK Mac products. To use the service you phone 0990 127753 (24 hours) and listen to the recorded instructions. (The call costs 10p a minute from anywhere in the UK.) You then use your touch-tone phone to select the options you want – start by requesting the Document Index, which lists the codes to enter next time you call to request any of the 90-odd fact sheets available, ranging from Macs, Apple printers and monitors to upgrades and System extras – anything from A/UX or *HyperCard* to the Japanese Language Kit.

Going the other way...

How about service sources other than Apple? A handful of service providers advertise their services, and a quick call to these shows that repairs can be an expensive business. A non-Apple-certified centre quoted an £80 callout charge (which includes the first hour of work), followed by a rate of £30 for each subsequent hour. An authorised service centre quoted £75 callout, plus £50 per hour, plus parts, although given the problem as described (a flickering monitor on a Performa 630) it was estimated that only an hour's work would be needed. VAT was extra in both cases, so you'd be looking at a total of at least £90 or so, plus any necessary parts. In general, most Apple Service Centres do seem professional, although it's impossible to generalise about the others.

The bottom line with service is that Apple is working hard to get its technical support working smoothly, but at the moment it has some way to go. When we asked when things might improve, Paul Vernon said bluntly, 'I don't know,' but was also very positive about the time, investment and commitment that Apple is putting in to try to get things working properly. It seems that, for now, you'll simply have to be patient. As for Apple's relationship with its dealer network, the days when the sale of Apple products was closely controlled by Apple itself have long gone, and now that anyone can sell you a Mac, you should treat sellers accordingly.

Hardware support remains expensive, and if you're buying a Mac you should ask about support before you part with any money. Apple Premium Care is only a minimal service, and it's unwise to expect a professional response from it – that is, if your business or income depends on your Mac working properly, you'd be wise to consider a supplementary service contract or insurance cover.

For software support, user groups and the Internet offer some of the most cost-effective informal support for users, while MACFORMAT gives you tutorials and Q&A sections in the magazine. They won't help if your hardware goes wrong, but for software help they may well be the most effective and accessible option of them all.

Dubiously relevant margin note

Want to find out more about that old classic, *Are You Being Served?* Well, it has its very own home page – and you can find it at **http://www.webcom.com/~jrice/aybs.html**.

Continued on next page

Softies: not a soft touch

When you buy any Mac software, you almost invariably get free telephone support for the first 60 or 90 days, to help get you up and running. After that, you commonly have to pay for further support – usually a flat 'registration fee', entitling you to unlimited phone consultations for a year.

If you're an individual user of Microsoft applications, you'll pay about £100 for a year's phone support, rising to £5,000 for business users wanting 'Priority Comprehensive' coverage of MS mail and database servers as well. Quark will support one copy of *QuarkXPress* (and throw in any free updates which may become available) for £175 a year, though there are discounts – for a 100-user licence, the cost falls to just £44 a copy.

Claris (0800 422322) charges around £116 for one year's support for one product (with discounts for additional products), but this includes a subscription to a quarterly magazine promising 'in depth articles and tips' (a CD version is £47 extra). Or you can register and get a 'Claris Card' which entitles you to 'pay-as-you-go' for just £1.99 per minute 'talking time' (and hope there's a short answer to your query) – or even less if you pre-pay for 20 or 30 minutes up front.

A few software houses and distributors – notably Adobe – still offer free support, but most now argue that expert support staff can be a hefty overhead (Microsoft UK post-sales support has over 150 full time staff) and it wouldn't be fair to add the cost of this onto the price of the software – that would be forcing buyers who never make use of the service to pay for it. Besides, some users reach for the phone before they even bother to check the manuals – although Quark made itself no friends when it admitted up-front that it was instituting a charge partly to 'encourage users to consult the product documentation' first.

SMART BUYING

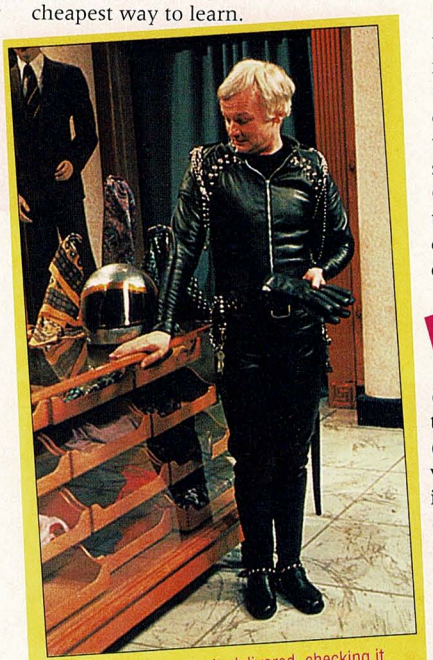
How can you ensure your Mac isn't a nightmare? What are your rights as a buyer? Here's everything you need to know about the ins and outs of consumer law.

Follow these nine simple steps whenever you make a major Mac hardware or software purchase, and you increase your chance of making sure everything will go right, and you don't end up losing out.

1 Do your research. Reviews in magazines like MACFORMAT, spec sheets from manufacturers and demonstrations from dealers or at trade shows (such as the annual Apple Expo) are essential if you want to work your way through the jungle of retailers and products. Never, ever buy blind – that's a recipe for disaster. Always proceed methodically: decide what you want, how much you want to spend, pick your software, buy the hardware that will drive it, decide how much support you'll need for both, and find the best price for the package.

2 Include the extras in your budget. You'll need to allow for Mac adaptors for monitors, leads, floppy disks, and – with some dealers – monitors and keyboards as well, as these won't be included in the price you're quoted. You'll usually also need to add VAT to the prices in adverts – by law, an advert must state explicitly if VAT is *not* included, but this statement is invariably in the fine print. Make sure that you have everything you need, and that you know how much it's all going to cost you.

3 Make sure you get support. Ask about callout times and if they're guaranteed. If you're a business user (or if you don't mind pretending to be one) ask for references. You'll offend quite a few companies this way, but it will also tell you who the really reputable support companies are. Also, ask about software support. If you're buying new software you haven't used before, consider doing an evening class to get up to speed – it's by far the best and cheapest way to learn.



When your mail order is delivered, checking it may mean that you have to ask the carrier to wait.

4 Place an order. Be absolutely specific about what you want, make a note of the date and time of the conversation, and take the name of the person you spoke to. You may try haggling a bit at this point – it's always worth asking if that's their best price, and suggesting a discount. If all else fails, ask for a free packet of floppy disks or a printer lead. Make sure you agree the price!

5 Be a smart buyer. If possible, pay by credit card whenever the *total* transaction is over £100. Even if you pay only *part* of the total by credit card, if a dealer goes bankrupt you'll be able to claim your money back from the credit card company. Otherwise pay by cheque or postal order. Never send cash through the post, and never accept a surcharge on a debit card – although surcharges on credit cards are not unusual.

6 Take delivery. If you're buying in person, check that everything works before you leave the shop with your kit. Ask for a demonstration if you have to. By mail order, write 'goods accepted subject to inspection of contents' when the boxes arrive. If there are any problems, phone the seller immediately and let them know. Confirm this in writing immediately too. As always, note down the name of the person you speak to, and the date and time.

7 Know your rights. Legally, what you receive must meet the following criteria:
(a) it must be 'of merchantable quality' – that is, it must actually work.
(b) it must be 'as described'. If the advert says it has a 540Mb hard disk and it has a smaller one, you have a solid case for action.
(c) it must be 'fit for the purpose' for which it was sold or which you specified when you ordered. If you want to do vector graphics or image retouching, a copy of *QuarkXPress* won't be much use to you. It's a good idea to make sure that you're being sold what you really want – if someone sells you a spreadsheet when all you want is a simple domestic accounts package then they're actually on very unsure ground legally.

If what you receive fails on any of these counts you are entitled to a re-

MACADVOCATE

Have you had problems with kit you've bought and difficulties getting it put right? Or perhaps you've received particularly good service from a dealer. We can't intervene in specific cases or give you personal advice, but if there are general points of law raised, we'll explain them in future issues of MACFORMAT so you'll know where you stand. Write to: 'Mac Advocate', MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

A WORD FROM THE WISE

Geoff Snowball is Swindon's Trading Standards Officer, which means it's his job to make sure that retailers and dealers abide by the Trade Descriptions Act, and to take action if they don't. He explains that the law is unclear in some of its aspects, and that there are a few things consumers should be aware of when complaining.

'When something doesn't work properly straight away, consumers have an automatic right to a refund. In this case, the problem falls under the Act – something isn't fit for the purpose for which it was sold – and legally you're fully entitled to a replacement or your money back. This applies even if your machine goes off to be repaired immediately and comes back in a defective state. You won't have had any use out of the machine and you're entitled to its full value in return. Technically the seller is in breach of contract.

'The law is more vague if you wait a while. If something breaks down after a week or two, all the law says is that you must have had "a reasonable opportunity to examine the goods". It doesn't specify what this is, and once outside a reasonable period the warranties come into force.

'If something breaks down, and you bring a civil action of breach of contract against a seller, then if the case isn't clear the judgement can go either way. The seller is still obliged to compensate you, but your right to a full refund is lost. And you still have to prove to the judge that there's a problem in the first place. That can mean hiring an expert witness, which you have to pay for up front.

'One other point to watch for is hire purchase. With HP, the finance company becomes the seller – effectively they buy the product, and sell it on to you – so legally they have the seller's usual obligations. Just to confuse things, the official warranty may be with someone different – the shop or the manufacturer, it all depends – but legally the seller is still the one obliged to make sure that your machine does what it should.

'My main advice to buyers would be to do as much preparation and research as possible. Never, ever just walk into a store and buy a computer. You'll get a lot more respect from dealers if you go in there with some knowledge of what you're talking about, and it will be much harder for them to sell you something you don't really want or need.'

CASE HISTORY: PETER SAVAGE

Peter Savage works in the TV industry. Last June he placed a large order with a well known supplier, but things didn't quite go according to plan...

'I ordered about £5,000 of Mac equipment from this outfit. When the equipment arrived, I unpacked it, connected it all together, and it all seemed okay. About a month later it started crashing, and eventually it wouldn't even boot properly. When I got through to a support manager he was very evasive, so eventually I talked to someone higher up at the company, and she just said "tough". Her exact words at one point were, "We're a mail order company – we can't check everything."

'Meanwhile I'd taken it to an Apple Centre and they discovered a long list of faults – some parts were missing, the memory was a mix of different speeds, and the hard disk was connected to the wrong port. It made me wonder whether the machine had been used in a trade show, and maybe wasn't even new.

'I called someone at Apple's Executive Relations Department, and I got the impression that she wasn't going to do anything about it either. She was sympathetic, but she didn't think writing to the mail order dealer would help. So in the end there was no response from any party.

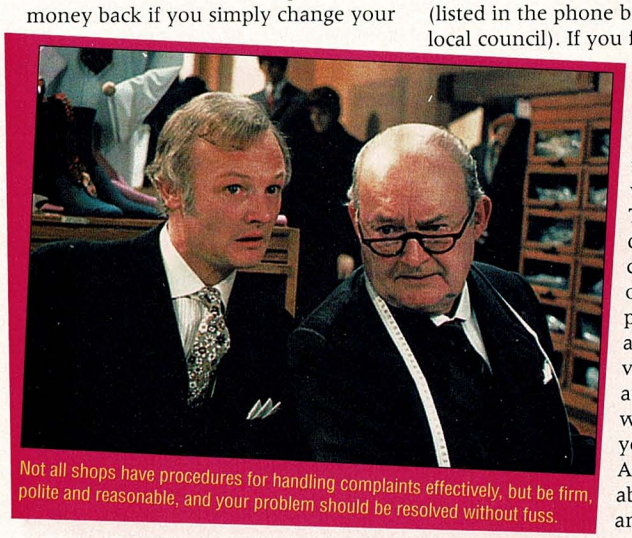
'My general feeling was that once the mail order company had my money, they didn't care any more. I'd just like to warn people that this is the kind of thing they can expect from some dealers. Now some little things have started to go wrong, and I'm thinking of taking legal action to get things sorted.'

MACFORMAT says: This looks like a prime case for legal action. The machine clearly wasn't 'of merchantable quality', and the fact that it took a month for the problems to appear seems to be being used as a red herring to distract Peter from his rights. Apple's response was also disappointing, although it did at least offer to repair the machine.

Peter's main mistake was not to ask about support and warranties before he bought the machine. These should always be discussed, but the mail order retailer conveniently forgot them – this made it easier for it to wrong foot Peter when things started to go wrong.

fund or replacement right away. If you hang on to the machine and use it anyway, you're still entitled to some compensation, but it could be argued in court that you'll have had some 'enjoyment' out of it and you're no longer eligible for a full refund, or even that you've accepted it as is. It's best to take action immediately.

8 Deal with problems firmly, but don't be aggressive or abusive. Don't assume that dealers are all out to rip you off – reputable companies will take some pains to keep customers happy and thus preserve their reputations. Be clear about what you want, but be reasonable. You're not entitled to your money back if you simply change your mind or find a better price elsewhere. If you have a real problem but it isn't put right when you ask, put your complaint in writing and send it to the manager or owner (ask for the correct name and job title). Make sure you give them a reasonable time to reply – say, 14 days or so – and keep copies of all correspondence.



Not all shops have procedures for handling complaints effectively, but be firm, polite and reasonable, and your problem should be resolved without fuss.

9 If your dealer is being uncooperative, you have recourse to the following:

(a) A solicitor. Some will give you a free initial consultation. But unless the sums involved are large, you may be better off pursuing the matter through the Small Claims Court.

(b) Your local Trading Standards Office (listed in the phone book under your local council). If you feel badly cheated, and the kit you bought doesn't live up to the claims made for it, it's always worth ringing the Trading Standards Office. They can put pressure on a retailer to put things right, and can also advise about legal action. It's also worth talking to your local Citizen's Advice Bureau about Legal Aid and your rights.

Mail order can be significantly cheaper, but one advantage of buying from a shop is that you can test the product in person before parting with your dosh.

(c) The Small Claims Court (contact your local County Court for details). With a new upper limit of £3,000, Small Claims is due for a boom in business. In the court you present your side of the argument, the dealer presents theirs, and the judge makes a decision – you don't need to hire a lawyer to represent you. Initially it's all done by letters, so you're unlikely to need to spend more than a few hours in court at most. Although slightly arbitrary at times, Small Claims remains the best option for legal action. If you win (and if you have a good solid case, you should) you get everything you want, and the other side pays the costs.

Continued on next page

CASE HISTORY: DR ROBERT INSALL

Dr Insall is a molecular biologist working at University College London. In September last year he ordered a printer from a MACFORMAT advertiser which was advertised as 'having 6Mb of RAM'. In fact, when the printer arrived it had 3Mb, but came with a proprietary RAM doubling program, though that didn't work as advertised. 'The advantage I had was that we're a business, so all I had to do was not pay their invoice, and ask them to take the goods – they've only just done that. Phoning was a waste of time, because no one was ever authorised to do anything. I used faxes instead – I find that the controlled aggression works much better than shouting at people.

'I made the point that if they wanted to take their argument (that a 3Mb printer with extra software was equivalent to a 6Mb machine) to the Trading Standards Office, I would be happy to let them do that. After a reasonably short time they did take the printer back, and I got one from elsewhere. In fact they behaved much better than I expected.

'But even though the new printer was cheaper, it's all been very annoying. If you cost my time at anything like a sensible rate it would have been cheaper to keep the old one and buy more RAM for it.'

MACFORMAT says: Robert had a major advantage in his case: as an employee of an institution, he could afford to delay payment and wait until the retailer had made good its mistake. But it's surprising that any reputable retailer would try a scam like this. Perhaps some people really were fooled, but it's obvious that many wouldn't have been. In fact, a call to place an order for the same printer from the same company made it clear that whatever it may have been doing, it's not doing it any more – the printer was quoted as coming with 3Mb, and no RAM doubling utility was mentioned.

BACK TO THE FUTURE

Just what does the future hold for Apple? And what does this mean to you, as an ordinary Mac buyer?

Apple lives in interesting times. It's the only personal computer company ever to undertake a major technological transition from one family of processor chip to another while maintaining compatibility with older machines. It's also the only one that still relies on a handful of obscure parts for its machines – and, what's more, a *different* set of specialised components for just about every single model in its range.

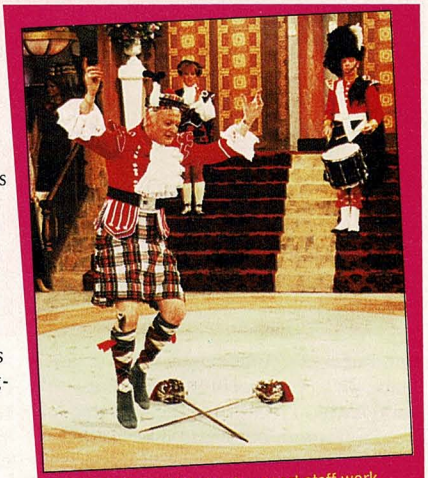
The pace of change in technology means that tomorrow's Mac may be very different from today's.

This is one reason why Apple has been having problems. No one, least of all Apple, expected the PowerMacs to be quite as popular as they have been. Motorola still can't make enough of new PowerPC 604 chips to meet the demand, and probably won't be able to for at least another three months. And some of Apple's other suppliers have also been having problems meeting the demand for Mac-specific components. As a result, some of the machines at the top end of the Mac range have been in short supply – at one point, Apple had back-orders worth $1,000 million on its books, awaiting delivery, though it has managed to catch up significantly and it has more than enough Performas in stock to meet the demand. More importantly, there are no reports of shortages in the UK and Europe, so you should have no trouble finding the Mac you want to buy.

Recently the choice has widened to include 'Mac-compatibles' from manufacturers other than Apple (see page 76). But instead of the PC-like free-for-all that some were expecting, Apple has kept tight rein on who wins a licence to make compatibles, and seems to be moving clones into niche markets where there isn't already a strong Apple presence. Last year, PC giant Gateway was turned away from Apple's door. The official reason was that Gateway was worried about parts shortages, but inside sources have suggested it was because Apple was worried about the competition.

The end result for the consumer, however, is a broader choice of machines, at least at some 'professional' levels. Ironically, the range of choice from Apple itself may shrink, as the American parent company economises by rationalising its array of models.

But what about more basic levels of sales and service? At the moment, on an international scale, Apple is feeling embattled. Although sales are up, revenue is down (see this issue's News pages for the details), and with less money to go around, Apple seems to be concentrating on surviving and working on new developments rather than marketing its existing lines or feather-bedding its customers. In the US, staff cuts have been made in sales, marketing and administration, though admittedly not yet in technical support or research and development.



Reputable Mac sellers and support staff work hard to keep up with the demands made of them.

Fortunately, things seem healthy in Europe, where Mac sales leapt by 18% over the last year. For the foreseeable future, there should be no shortage of Macs to choose from, and no doubts hanging over Apple's continuing ability to support its machines, still less its commitment to its customers. **MF**

BUT WILL YOUR MAC BE OBSOLETE IN A YEAR?

Imagine a Mac that anyone could make, and which could run Windows, UNIX and any other operating system together with the Mac OS. That's the goal of the PowerPC Platform project, which IBM, Apple and Motorola have been working on for the last few years. The PowerPC Platform (PPCP) is a design for a general purpose computer built around a PowerPC chip that anyone can build and sell. Unlike current Apple products it doesn't rely on special parts, so it should be both cheaper and easier to build.

At last year's Comdex computer fair it was announced that the Mac OS will be part of the PPCP specification – in other words, any PPCP computer will give you the option to fit Mac chips or run the Mac OS, no matter what other software it runs. The first PPCP machines could appear as soon as the end of this year, with a wide selection of cut-price clones from almost everyone due very soon after.

So does this mean your existing Mac will become obsolete when this happens? No, it doesn't, any more than first-generation, 601-chip-based PowerMacs became obsolete when the new 604-chip-based machines appeared. All it means is that there will be a range of Macs – or rather, 'Mac OS capable' machines – to choose from, with varying levels of power, features and expandability. Just as there has always been. So if you can find a Mac you want to do the job you want now, go for it. With a Macintosh, you can't go far wrong.

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NICHOLAS SMITH

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ARTHUR BROUGH

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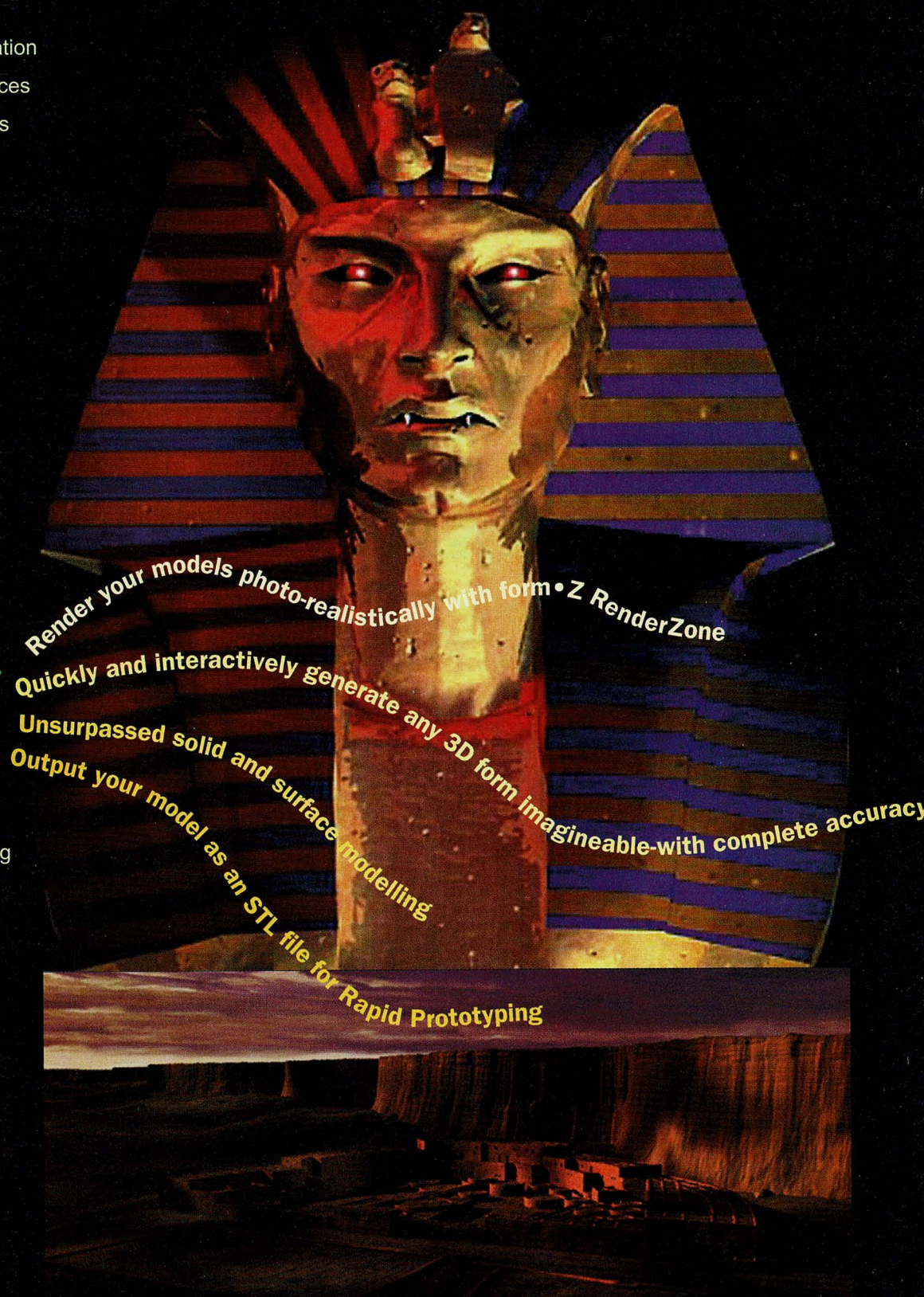
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Image by Roger Harris courtesy of Ultimate Future Games magazines.

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POWER MACINTOSH HARDWARE

Power Mac 7200/75 8/500	835
Power Mac 7200/90 8/500CD	1246
Power Mac 7200/90 16/1000CD	1647
Power Mac 7500/100 8/500CD	1685
Power Mac 7500/100 16/1000CD	2109
Power Mac 8500/120 16/2000CD	3244
Power Mac 9500/120 16/1000CD + 2Mb ATI Video Card	3242
Power Mac 9500/132 16/2000CD	3306
Power Mac 9500/132 16/2000CD + 2Mb ATI Video Card	3497
Power Mac 9500/132 16/2000CD + 4Mb ATI Video Card	3989
Power Mac 7200/75 8/500 + Multiscan 15" display + Design keyboard	1255
Power Mac 7200/75 8/500 + Applevision 1705 display + Design keyboard	1307
Power Mac 7200/90 8/500CD + Applevision 1705 display + Design keyboard	1686
Power Mac 7200/90 16/1000CD + Applevision 1705 display + Design keyboard	2115

APPLE MACINTOSH HARDWARE & BUNDLES

Mac Bundle	RAM	HD	Bundle includes	
Performa 630 8/500 CD	8	500	keyboard	743
Performa 630 8/500 CD Plus II	8	500	keyboard	780
Performa 630 8/500 CD	8	500	14" display & keyboard	924
Performa 630 8/500 CD Plus II	8	500	14" display & keyboard	956
Performa 630 8/500 CD Plus II	8	500	Multiscan 15" display & keyboard	1037
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card, DOS 6.22, Windows 3.11 & k/b	958
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card + 14" display & keyboard	1154
Performa 630 12/500 CD DOS	12	500	DOS Compatibility card + Multiscan 14" display & keyboard	1160

POWER PC PERFORMA HARDWARE & BUNDLES

Mac Bundle	RAM	HD	Bundle includes	
Performa 6200 8/500 CD Plus II	8	500	keyboard	924
Performa 6200 8/500 CD Plus II	8	500	Video-in-TV, keyboard	1036
Performa 6200 8/500 CD Plus II	8	500	14" Display & keyboard	1069
Performa 6200 8/800 CD M Plus II	8	800	Modem & keyboard	1078
Performa 6200 8/500 CD Plus II	8	500	Multiscan 15" display & keyboard	1151
Performa 6200 8/500 CD Plus II	8	500	Video-in-TV, 14" display & keyboard	1192
Performa 6200 8/500 CD Plus II	8	500	Video-in-TV, Multiscan 15" display & keyboard	1248
Performa 6200 8/800 CD Plus II	8	800	Video-in-TV, 14" display & keyboard	1233
Performa 6200 8/800 CD M Plus II	8	800	Modem Multiscan 15" display & keyboard	1315
Perfoma 5200 8/800 CD	8	800	Built in 15" display & keyboard	1152
Perfoma 5200 8/800 CD Plus II	8	800	Built in 15" display & keyboard	1232
Perfoma 5200 8/800 CD M Plus II	8	800	Modem, Built in 15" display & keyboard	1384
Perfoma 5200 8/800 CD M Plus II	8	800	Modem, Video-in-TV, Built in 15" display & keyboard	1438
Perfoma 5300 16/2000 CD M Plus II	16	2000	Modem, Video-in-TV, MPEG, Built in 15" display & k/d	1932

Plus II bundles include the following software

Installed Solution Software - At Ease, Mavis Beacon Teaches Typing, Claris Works 3.0 Milie's Math House, ClickArt, Perfoma 7.5 System Software, eWorld, SpinDoctor, Hypercard Player, SuperMaze Wars, MacGallery, Thinkin' Things 2.

Included CDROM Software - Asterix Language, Rediex, Concertware, Rock Rap & Roll, Dorling Kindersley 'The Way Things Work', Snoopy CD, EA 3D Atlas, Daedelus Encounter, Grolier's Encyclopaedia, Making Music CD, Myst.

In adition, modem equipped configurations ship with 'Personal Communications Solution', and TV configuations are supplied with 'Avid Videoshop' and Apple VideoPlayer'.

The Perfoma 5300 MPEG machine also comes with bur MPEG CD titles

Ocean Life Hawaii, Return to Zork, Warren Miller, Wild Africa.

APPLE MACINTOSH POWERBOOKS

	RAM	HD	CPU	Screen	
Powerbook 190	4	500	66MHz LC040	9.5" GS PM	1030
Powerbook 190	8	500	66MHz LC040	9.5" GS PM	1174
Powerbook 190+TDK 28.8	4	500	66MHz LC040	9.5" GS PM	1213
Powerbook 190cs	4	500	66MHz LC040	10.4 PM	1344
Powerbook 190+TDK 28.8	8	500	66MHz LC040	9.5" GS PM	1356
Powerbook 190cs	8	500	66MHz LC040	10.4 PM	1493
Powerbook 190cs+TDK 28.8	4	500	66MHz LC040	10.4 PM	1542
Powerbook 190cs+TDK 28.8	8	500	66MHz LC040	10.4 PM	1665
Powerbook 5300	8	500	100MHz 603e	9.5 GS PM	1403
Powerbook 5300+TDK 28.8	8	500	100MHz 603e	9.5 GS PM	1563
Powerbook 5300c	8	500	100MHz 603e	10.4 AM	2338
Powerbook 5300c+TDK 28.8	8	500	100MHz 603e	10.4 AM	2468
Powerbook 5300cs	8	500	100MHz 603e	10.4 PM	1769
Powerbook 5300cs+TDK 28.8	8	500	100MHz 603e	10.4 PM	1920
Powerbook 5300c	16	750	100MHz 603e	10.4 AM	2848
Powerbook 5300c+TDK 28.8	16	750	100MHz 603e	10.4 AM	2968
Powerbook 5300cs	16	750	100MHz 603e	10.4 AM	2216
Powerbook 5300cs+TDK 28.8	16	750	100MHz 603e	10.4 AM	2351
Powerbook 5300ce	32	1100	117MHz 603e	10.4 AM	4336
Powerbook 5300ce+TDK 28.8	32	1100	117MHz 603e	10.4 AM	4500
Powerbook 5300c Powerport Plat Modem	8	500	100MHz 603e	10.4 AM	2657
Powerbook 5300c Powerport Plat Modem	16	750	100MHz 603e	10.4 AM	3167
Powerbook 5300cs Powerport Plat Modem	16	750	100MHz 603e	10.4 PM	2535
Powerbook 5300cs Powerport Plat Modem	8	500	100MHz 603e	10.4 PM	2088
Powerbook Duo 2300c	8	750	100MHz 603e	9.5 AM	2320
Powerbook Duo 2300c	20	1100	100MHz 603e	9.5 AM	3026

Key: GS = Greyscale, PM = Passive Matrix, AM = Active Matrix

Powerbook Duo Mini Dock	239	Powerbook Duo 2300 DuoDock Plus	639
Powerbook PCMCIA Expansion Module	105	Powerbook 190 Infrared Kit	36
Powerbook Duo battery	59	Powerbook 5300 Lilon Battery	89
Powerbook 190/5300 AC adaptor	39	Powerbook 190/5300 NiMH Battery	119
Powerbook Duo AC Adaptor	45	Powerbook Type II/Type III Battery	85
Powerbook Standard Carry Case	20	Powerbook Business/Designer Carry Case	40

APPLE ON-SITE MAINTENANCE

		1 yr	2 yr	3 yr
Group 1	StyleWriter II,1200,2200 & Portable, ImageWriter, QuickTake	15	55	92
Group 2	Scanners, CD-Rom Drives, Monitors up to 16", Colour StyleWriter 2400, Personal, Select & 4/600 Lasers	15	84	126
Group 3	Performas, Powerbooks (except 5300), LaserWriter 16/600 Monitors over 16",	15	99	165
Group 4	PowerMacs, Workgroup Servers, Colour LaserWriters	15	135	220

MEMORY

	4Mb	8Mb	16Mb	32Mb
72 Pin SIMM PMac, Quadra, Perf 475/630/5200/6200	81	162	298	625
Powerbook 520, 520c, 540, 540c	130	265	449	
Powerbook Duo, 150	149	249		
Powerbook 190, 5300		279	505	899

	1Mb	2Mb	4Mb	6Mb	8Mb	16Mb
Personal Laserwriter 320		82		229		
Laserwriter Select 300/310	65		165			
Laserwriter 16/600			145		260	520
Laserwriter Pro 630			150			

DIMMs Memory	4Mb	8Mb	16Mb	32Mb	64Mb
7200, 7500, 8500, 9500	140	205	374	840	1458

Video RAM	256k	512k	1Mb	2Mb
	15	25	65	120

Secondary Cache Memory	256k	512k	1Mb
PowerMac 6100/7100/8100	105	199	385
PowerMac 7200/7500/8500/9500	95	160	410

DAYSTAR ACCELERATORS

Turbo040i 20MHz No CoPro	81
Turbo040 33MHz Universal CoPro	199
Powercache 33MHz Univ NoCoPro	89
Powercache 33MHz No CoPro SE/30	107
Powercache 33MHz & CoPro	117
Powercache 33MHz, CoPro SE/30	117
Powercache 40MHz No CoPro	93
Powercache 40MHz No CoPro SE/30	117
Powercache 40MHz & CoPro	129
Powercache 40MHz, CoPro SE/30	129
Powercache 50MHz No CoPro	149
Powercache 50MHz & CoPro SE/30	199
Powercache , Turbo040 Adaptor	29
Charger Accelerator	58
Equalizer LC	65
Equalizer LC & CoPro	91
Fastcache IIci 32k	61
Fastcache IIci 64k, IisI 64k	78
Quad040 Accelerator	324
LT200 Connection Appletalk MCA	16
Photomatic Software	3

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ACCESSORIES

Design Keyboard	74
Extended Keyboard	128
Adjustable Keyboard	148
Desktop II Mouse	35
PlainTalk Microphone	20
Design Speakers II	46
MIDI Interface	53
Performa Video-in card	85
Performa Video-in-TV card	215
Performa Presentation kit (Video Out)	199
Power Mac Upgrade Card	545
Power Mac 6100 DOS Compatibilty Card	385

APPLE HANDHELDS

Newton Message Pad 120 v2			395
1Mb Storage card	60	2Mb Storage card	110
4Mb Storage card	200	Connectivity Kit	55
Fax Modem card	80	Leather Carry case	40
Mains Adaptor	18	NICAD Battery Pack	16
Print Pack	45	Recharger & Mains	54

SOFTWARE

Expense Plus	38	File Pad	75
Go Figure	25	Jig Saw	16
Notion List Manager	30	Newton Utilities	23
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PCMCIA SOFTWARE

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Ethernet NB TP	80	Ethernet LC TP	68
BNC/TP Transceiver	34	AUI Transceiver	54
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Communicard RJ45 PCMCIA	130
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DeskWriter 340+ASF	189	DeskWriter 660C	240
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DW 340/600 Col Kit	28		

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LW 16/600PS & fax	1679	LW Colour12/600PS	4479

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FaxModem 144 P/B	135	FaxModem 288 P/B	135
Superhighway 288 Internet			185

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US Robotics Sportster 28.8 Fax External

MAC&FAX

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IIsi Tranny unit	269	Arcus II & Tranny	2219
DuoScan	Call	FotoTune	Call

StudioScan IIsi

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- 2400 ppi by interpolation
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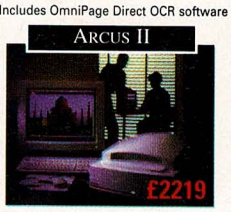

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AGFA The complete picture.

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Photoshop can only be bought with above scanners

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SuperVista S12FE	675	SuperVista S12 Pro	975
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NEC

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D2

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MICROPOLIS

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1991AV (9.1Gb)	1510		

QUANTUM

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FB1080S (1Gb)	193	AT2150 (2.1Gb)	545
VP32210 (2.2Gb)	455	GP4301S (4.3Gb)	670

SEAGATE

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A3 Electrostatic	618	A2 UltraPad	1339

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650Mb/74min	8	7	6
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Macintosh Printer	5	-	8
		1m	**2m**
SCSI C50M-C50M		8	15
SCSI C50M-HC50 Micro D		19	29
SCSI HC50 Micro D - HC50 Micro D		29	39
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SCSI HC50 Micro D - HC68 Wide SCSI		65	-
SCSI D25M-C50M		6	19

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CSWriter 2200 Col Tank	17	SWriter 2400 Black	20
StyleWriter 2400 Col	25	SWriter 2400 Blk Tank	8
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HP DW 600, 660 Black	19	HP DW 600, 660 Col	20
HP DJet 850, 1600 Blk	20	HP DJet 850 Colour	18
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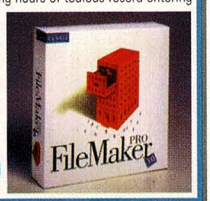

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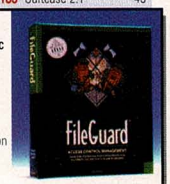

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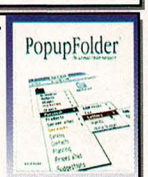

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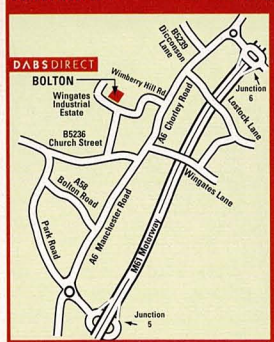

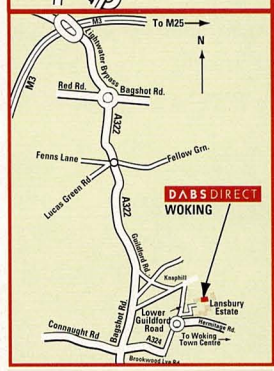

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Cut and paste

We gave away *Color It!* on the MACFORMAT 31 Cover CD – see page 115 for details

Cutting and pasting is a fundamental part of image manipulation. Brian Larkman shows you how to make the most of *Color It!'s* many cut and paste tools.

HISTORY

Cut, copy and paste derive from the pre-computer technique of cutting up your text or graphic document and reassembling it in the layout required – mind-numbingly tedious. The ease of this process on computers transformed graphic design.

After the filter-crazy warp-fest that we all go through when we start off in image processing, most of us soon settle down to the software's main purpose – cutting and pasting. Swapping body parts and re-siting chunks of the national heritage can be something between playing God and spraying graffiti, and cutting up a stack of clip photos to give a new view of the world is fun.

Cutting and pasting (AKA montage or compositing) is the process of selecting a feature in an image and moving it to a new position, often on another image. This involves drawing carefully around the area using one of a range of 'selection' tools, then copying or cutting this choice to the Clipboard (a special area of memory set aside to store these temporary 'clips'), and finally pasting and blending it smoothly into its new background.

Natural selection

The key to cut and paste is the selection tools. Separating an area from its background quickly and easily, with a minimum of fringe pixels around the edge, is vital if you're to create a convincing montage. *Color It!'s* range of selection tools equals or beats anything you can find in *Photoshop*. As well as the usual rectangle and ellipse shapes, it offers most regular and irregular polygon outlines, and even a **Custom** tool that converts any freehand selection into a repeatable, resizable shape.

Color It!'s Magic Wand tool, used to select areas of a similar colour, is enhanced by its ability to draw over a range of colours and select them all. As with the other selection tools, you can enlarge or contract the range of colours selected by the Wand using the Selection Calculator (similar to holding **[shift]** or **[command]** in *Photoshop*), or using the **Grow/Shrink Selection** pop-up dialogue. This last

BACKGROUND COMPOSITION

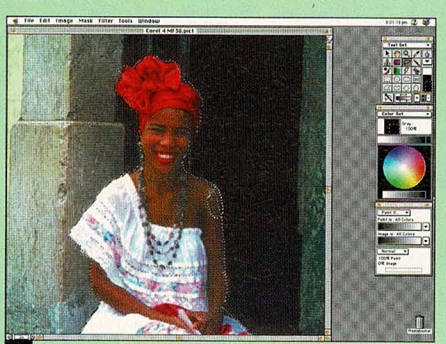
1 Its rare to find an image that exactly matches your needs for a background, so, as here, create a composite from several. The largest part is one of the Corel clip photos on the MACFORMAT 28 Cover CD (28063). Edit out the foreground posts using the **Stamp** tool.

2 Next, create a path from a small section of another image. Select it using the **Lasso** tool, cut it out using **Edit/Copy,** and paste it onto this image using **Edit/Paste.** A piece of path is provided on this issue's Cover CD. This section is too small, so use the **Stamp** tool again to reproduce the path down into the foreground.

3 To get an unreal, vivid, hand-tinted look, paint the foreground trees and flowers over with a medium sized brush and a mid-purple colour in Subtract mode (using the **Paint Controls** window). Set the paint level to 10-20%. This enriches the colour opposite on the colour wheel – in this case green. Add shading (using the **Darken** tool) and some **Sharpening**, and save your image.

FREEHAND SELECTION AND RESIZING

1 The background around this figure (Corel photo 93000 from the MACFORMAT 30 Cover CD) makes it necessary to pick the woman up by drawing carefully round her with the **Lasso** tool. Hold the **[option]** key while making the selection. The **Lasso** tool acts as both a freehand tool (holding the mouse button) and rubber line tool (only click button when line is correctly placed).



2 Even if you keep the lines short as you draw, if you are drawing with a mouse you will inevitably have difficulty keeping to the outline. Make corrections using the **Selection Calculator** buttons at the bottom of the toolbox. Click on the **[+]** button and draw around edges that cut into the selection; click on the **[-]** button and draw round edges that veer away from the correct path.

3 Once you have a selection outline, feather it by one pixel (see step three in the 'Selecting and feathering' box), then copy to the clipboard and paste onto the background. Now resize the clip – use **Image/Effect/Stretch** and hold the **[shift]** key while dragging one of the corner handles to maintain proportions. Move the figure into the correct position and drop the selection. Save.

To create a reasonable illusion, pasted objects should blend perfectly into the background image. Feather the edges slightly to avoid harsh joins and obvious pixels, and choose objects that have the light coming from a consistent direction, with a tone that matches the part of the background they are placed in. You can judge for yourself how well those work here.

dialogue is unique to *Color It!* and enables the range of selected colours to grow or contract dynamically without the need to reselect.

Virtually all Mac drawing programs since *MacPaint* have included a **Lasso** selection tool, designed to create selection outlines that fit tightly around an object. If the background is a single colour, you can draw the tool roughly around the object, keeping to the background colour. When the outline encloses the object and you release the mouse button, the selection contracts, sliding over the background pixels until a solid boundary is met. *Color It!* varies this process by enabling you to set a 'threshold', defining the Light or Dark 'slippery' and 'solid' tones. Curiously, *Photoshop* treats the **Lasso** tool as a mere freehand selection, precluding the invaluable 'shrink' effect. Hold down the **[option]** key, and the **Lasso** tool draws straight 'rubber-banded' lines when you click the mouse button. You can extend the selection outline in straight lines with each click, or as freehand curves with normal drawing. The outline is not completed until you release the **[option]** key, which means you can take the occasional rest if you're constructing long, complex selection profiles.

Normally, starting a new selection cancels any previous outlines. If you wish to select several areas, however, hold the **[command]** key or click the **[+]** button in the Selection Calculator at the bottom of the toolbox. The **Scissors** tool enables you to cut selections into sections, but only operates in straight lines, while the **Zap** or **Lightning** tool deselects any selected area you click it in.

Selections are often difficult to create and easy to lose, so it's a wise move to convert them to masks and save them as a separate file. To find out more about this, take a look at the tutorial in MACFORMAT 31. It is useful to understand the difference between selections, selection masks and document masks, all of which are described in the 'Types of Selection' box, which you can find over the page.

See through selections

A great advantage of *Color It!* document masks is that they can be grey-scale images, enabling you to create selections that vary in density. For example, if you give a selection a gradient from white to black, top to bottom, then use it to cut an object from its background, the object will seem to fade from top to bottom when pasted onto a new background. This 'fading' effect, used around the edges

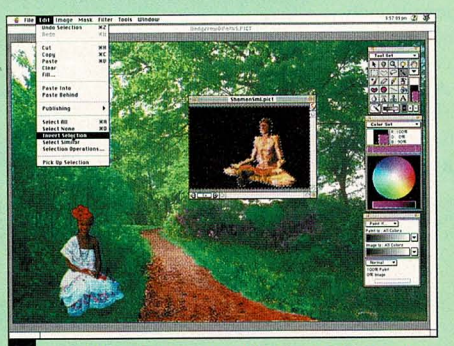
SOURCE IMAGES

Most of the images we've used are from past MACFORMAT Cover CDs and Cover Disks. You should be able to find what you need from the MACFORMAT 28, 29, 30, 31 and 32 Cover Disks. However, most of the images are too big to open in *Color It!* unless you have 24Mb of RAM or more, so we've included low res versions of most of them on the Cover CD. *GraphicConvertor 2.2* can load Kodak PhotoCD images and select a reasonable image size, which means all of the Corel images are available at any resolution. Several images are rendered direct from *Poser*. Other sources of images – apart from scanning your own – are landscapes from *KPT Bryce* and objects from 3D applications.

Continued on next page

SELECTING AND FEATHERING

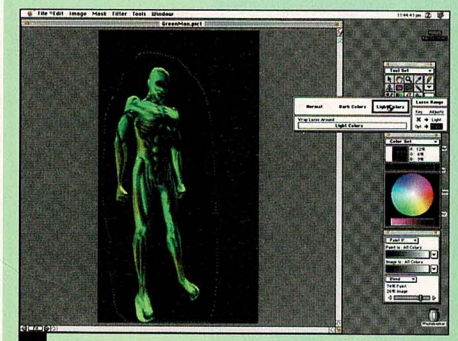
1 The plain background behind the meditating figure (rendered using Fractal's excellent *Poser*) simplifies selection. Set the Magic Wand sensitivity to 0% using the lower left toolbox icon. Click in the black area, then click the **[+] Selection Calculator** button and click carefully in the black area below his right elbow.



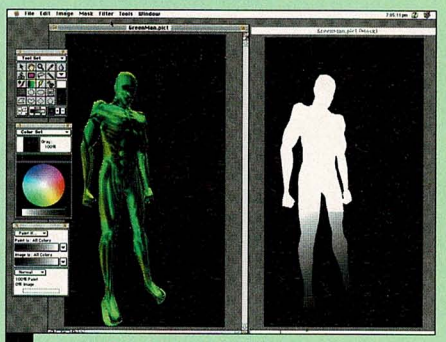
2 Invert the selection using **Edit/Invert Selection**. For the image provided, this should result in just the figure being selected, but other apparently black backgrounds can have a slightly darker or lighter border which you may miss with your initial Wand selection. Use the **[-]** selection button to deselect any that occur.

3 On an object this small, slight edge imperfections show up clearly, so soften the outline using **Edit/Selection Operations/Feather** set to Normal and one pixel. At a higher res, use wider feathering. Smooth any rough edges, but don't lose details where the selection is meant to be irregular. Copy and paste into position. Use the **Darken** tool, with a small brush, to dapple the figure.

LASSO SELECTION, TRANSPARENCY AND PLUG-INS



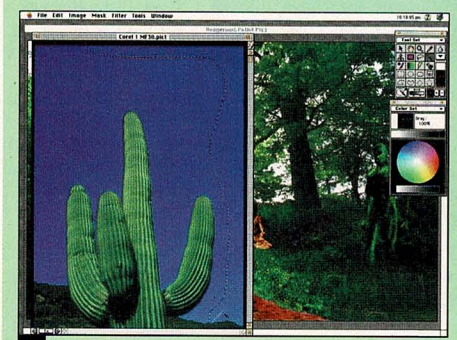
1 The plain background makes this *Poser* figure easy to pick up. Use the **Lasso** tool in **Light Colours** mode to draw roughly around the figure – the outline shrinks to it. Feather the edges. Scale the figure down either here or after pasting. Use **Mask/Selection To Mask** to create a document mask. To make the legs of this spirit figure 'fade', it needs a modified version of this mask.



2 Use the **Magic Wand** tool, select the mask document background, and invert it. Select the **Gradient** tool and set it to white-to-black (click on white in the palette, hold **[shift]** then click on black). Drag the tool and create a gradient on the legs. Drop the selection (**Edit/SelectNone**) then return to the green man image, and use **Mask/MaskToSelection**. Copy this and paste it into place.

3 The grass effect could have been applied to the figure at any stage, but let's do it now. It's created using the Xaos *Paint Alchemy* plug-in, but if you don't have this, try using the Aldus *Gallery Effects* Glowing Edges for a similarly weird effect. Like *Paint Alchemy*, you'll have to play with *Gallery Effects* for some time to get the best effect. Save those you like as templates.

'SELECT SIMILAR' AND 'PASTE INTO'



1 In many ways, *Color It!'s* selection tools are more intuitive and powerful than *Photoshop's*, particularly the **Magic Wand**. To select the background blue sky would usually need a fairly careful setting of the **Wand** tolerance, but here you can simply draw it over the shades of blue that you want to include. Release the button and they are all selected. Invert the selection and copy the cactus.

2 Dragging the **Wand** over sky showing through the trees selects it up to the leaf edge. Make use of the **[+]** button to select other areas of varying shades of blue or white – these indicate all of the shades to be selected. Use **Edit/SelectSimilar** to select all of the sky. Save this using **Mask/SelectionToMask**, return to the main image, and use **Mask/MaskToSelection** to bring it back.

3 It's simple to paste the cactus behind the trees and using **Edit/Paste Into** means that it will only show within the selected areas. If you resize at this point make sure the cactus clip is still selected. Drop the cactus and bring back the sky selection using **Mask/MaskToSelection** for repeated pastings in other places. Paste the cactus and work over it with the **Stamp** tool to finish the composition.

of a cut object, assists with the blending of a new object invisibly into the background of an image. An automatic edge softening method is built into *Color It!* – **Edge Feathering** is available in the **Selection Operations** area of the **Edit** menu.

When you start pasting the clips you have taken, there are a variety of techniques you can use. The most useful of these is the ability to paste clips into or behind a current selection. After copying an area, define a new selection and paste the clip into it. Effectively the unselected area acts as a mask. **MF**

FEATHERING

To blend successfully into a background image the edges of a clip should become progressively more transparent or 'feathered'. In *Color It!*, you can set feathering to any number of pixels deep from the edge, like *Photoshop* and other similar programs. However, using *Color It!*, you can set it to feather inwards or outwards from the edge, giving you a useful extra degree of control.

TYPES OF SELECTION

A **selection** is an area defined using one of the selection tools and displayed as 'marching ants' around its border. A new selection cancels the previous selection, while choosing a non-selection tool hides the selection.

In *Color It!*, plain selections do not act as masks, though they do constrain the effects of filters. You can make a selection into a **selection mask** using a menu choice. This masks paint and draw tools, but is only temporary – when a new area is selected, the old mask is lost and a new one created.

You can also make a selection into a **document mask** (using **Mask/Selection To Mask**). This creates a new document that can be saved as a separate image. This can be converted back to a selection, so make any complex or useful selection into a document and save it. Both types of mask can exist in the same document, making complex techniques easy to use.

WHERE CAN YOU GET THEM?

- We gave away *Color It! 2.3.5* on the MACFORMAT 31 Cover CD. You can upgrade to version 3.0.4 for just £49.95 including p&p and VAT. Turn to Reader Offers on page 112 to find out more.
- *Adobe Photoshop 3.0.0* costs £737.90. Contact Principal on 01706 832000.
- Xaos *Paint Alchemy 2.0* costs £92.83. Contact Letraset on 0171 928 3411.
- Fractal *Poser* costs £113.80. Call Computers Unlimited on 0181 200 8282.
- Corel offers a range of *Professional Photos* CDs. They cost £23.44 for one, £175 for a volume set of 25, and £934 for a full stock library of 200 CDs. Contact Channel MarketMakers on 01703 814142 for more information.
- *Flowering Plants* Volume from the Andromeda Interactive range. Each CD contains 100 photos in PhotoCD format at resolutions of up to 2,048 x 3,072. They cost £20 for one CD, or £44 for all three. Contact Andromeda Interactive on 01235 529595. The images used here are available on previous MACFORMAT Cover CDs. Turn to page 115 if you missed one.
- *GraphicConverter 2.2* is on the Cover CD every issue – you can find it inside the Resources folder.

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Stripping out garbage

You've got that alien text file onto your Macintosh, and you've found a way to open it. What do you do with all the rubbish you find inside? Rod Lawton leads the way.

LAST ISSUE...

...we showed you how to read disks that had been formatted on other machines, how to get the files off them and onto your Mac, and how to open them.

TYPOGRAPHICAL MARKS

These are the key combinations that you need to type to get the appropriate characters:

– option -
… option ;
‘ option]
’ option shift]
“ option [
” option shift [

There are several reasons why text files supplied by other people can be riddled with garbage characters. First, the file format may not be compatible with your word processor. The author's software includes all sorts of additional, hidden characters in the file to identify the application that created it, including the fonts used and other technical gibberish. If your word processor doesn't have an import 'filter' to recognise and interpret this information and act on it (to produce the right fonts, formatting and so on in your file) it assumes that it is part of the text.

Second, the author's application uses lots of codes within the text to specify emboldening, changing font sizes, indented paragraphs and more. Again, unless your word processor has an import filter to interpret this information, it assumes this is part of the text. Finally, although ASCII is a universal language understood by all, it's not quite as universal as it might be.

Can you start again?

If you are presented with a text file full of gibberish, the first thing you may want to try – which could ultimately be the quickest and cleanest solution – is to contact the author and ask them to save their files in a format that your word processor has an import filter for. Failing that, can they supply the file as plain ASCII, if they haven't already?

This will solve many of the problems you're likely to face. However, it's not always possible to get the file sent again, especially if you don't know the author – you may have downloaded it from an on-line service, or copied it from a CD-ROM. Whatever the reason, if you are stuck with the text file you've got, and it was not saved as ASCII text but in the format of a different word processor, your first job is to rid it of unwanted file header and footer information. This isn't difficult, but it is tiresome – particularly if your word processor scrolls slowly. What usually happens when you try to read a file formatted by a different word processor is that the text itself is in a single block, with technical gibberish at the start of the file and quite possibly at the end too. This can go on for many pages.

Your instant reaction will probably be to select and drag through the gibberish from the start of the document until you find the real text, delete the nonsense, then do the same for the gibberish at the end of the text. This can be slow and tiresome, though. One solution is for you to quickly scan through the file to find the text. You don't have to do this by scrolling – it's quicker to drag the scroll box through the document stopping at various points to see if you've reached the text.

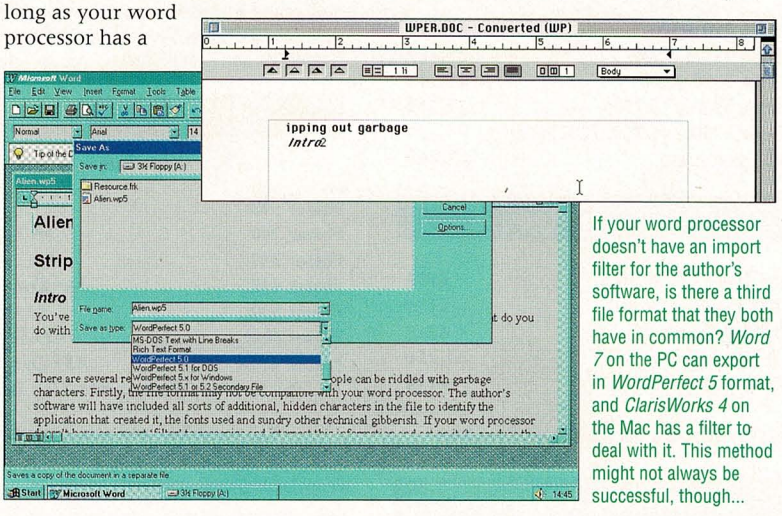
Find the start of the text, then, as long as your word processor has a command enabling you to select from the current cursor position to the beginning of the document, your problem is solved. You can do the same thing at the end of the text.

Alien file header and footer information might look like a nightmare to deal with, but it's easy enough to pick it out and eliminate it from your document. The real problems arise when you need to weed out the extraneous characters from within the text itself. These include formatting characters, wrongly-translated special characters and unwanted character returns.

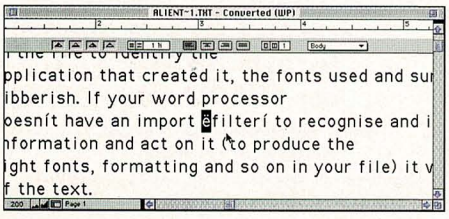
To deal with all of these, you need two things: your word processor's **Find/Change** function and an analytical mind. Let's deal with the types of problem you may encounter in turn.

Formatting characters

You don't need formatting characters. They are inserted by the author's application and can't be understood by yours, so simply get in the way. Before you set about using your **Find/Change** command to delete them, though, be careful. Applications often use legitimate ASCII characters (characters that the application makes use of in the text itself) to apply the relevant formatting and styling. Any possible confusion is avoided by using



If your word processor doesn't have an import filter for the author's software, is there a third file format that they both have in common? *Word 7* on the PC can export in *WordPerfect 5* format, and *ClarisWorks 4* on the Mac has a filter to deal with it. This method might not always be successful, though...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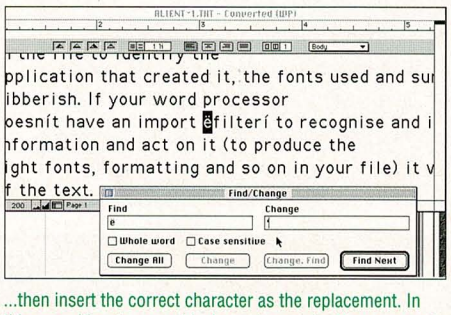
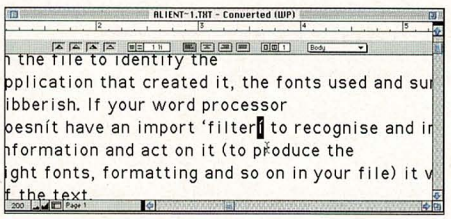
f the text.

Bizarre characters are often substituted for the correct ones. To replace them, simply copy and paste them into the **Find/Change** dialogue of your word processor...



...then insert the correct character as the replacement. In this case, it's a typographical opening quote. Now carry out a global **Find/Change** to fix every instance in the document.


ALIENT~1.THT - Converted (WP)
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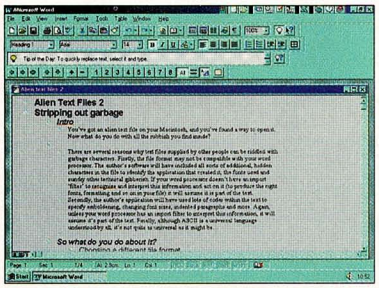
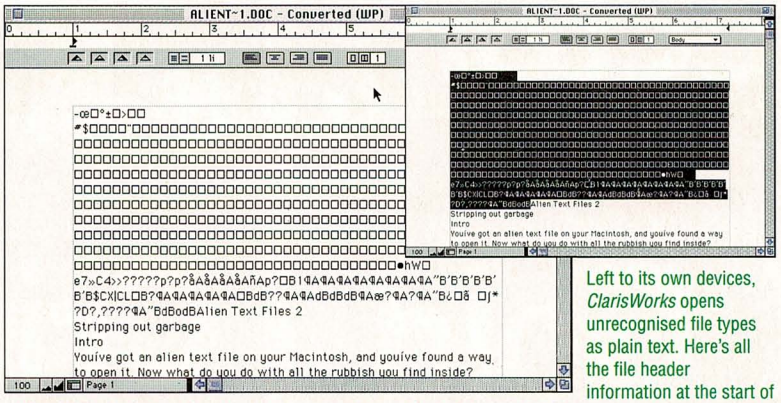
oesnít have an import ‘filter’ to recognise and i
nformation and act on it (to produce the
ight fonts, formatting and so on in your file) it v
f the text

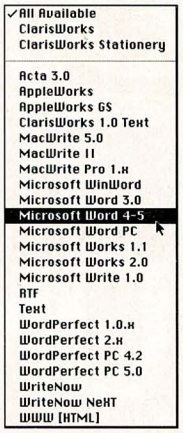
You can then go on to do the same with all the offending characters. You may have to do this half a dozen times – prime culprits that you should look out for include 'en' dashes, typographical quotes and ellipses.



Many 'alien' text files come from PCs, and since *Word 7 is* now bundled with most new machines, this is a good example of the type of file that you might find yourself having to attempt to tidy up.


ALIENT~1.DOC - Converted (WP)
Alien Text Files 2
Stripping out garbage
Intro
Youve got an alien text file on your Macintosh, and youve found a way to open it. Now what do you do with all the rubbish you find inside?

Left to its own devices, *ClarisWorks* opens unrecognised file types as plain text. Here's all the file header information at the start of a *Word 7* file. Selecting it by dragging is reasonably quick, but if your alien file contains characters that translate to page-break commands (a common situation), find the start of the 'real' text first, then look for a 'select-to-start-of-document' command (**[shift]-[command]-[up arrow]** in *ClarisWorks).*



ClarisWorks 4 has as big a set of import filters as you'll see anywhere, but it's still only up to *Word 4/5* on the Mac. The *Word* PC filter is a generic one, and it can't cope with version 7.

them in combinations that you're unlikely to employ in the when writing text yourself..

For example, an application might use the two-character '\b' combination to switch on text emboldening. If you simply deleted all the '\' characters in the file you would leave lots of isolated 'b's lying around. If the file is an explanation of how DOS names directory paths, taking out the backslash '\' character turns it into nonsense, and stripping out the isolated formatting 'b's requires careful thought. The answer is to search for the '\b' characters as a pair. But what if it *is* a feature about DOS pathnames, and the text contains references to the \bilgewater directory? Taking out the '\b' combination will leave a document full of references to a town called 'ilgewater'. You need to search for ' \b' (put a space before the backslash character). DOS pathnames don't have spaces before the backslash so you're okay. Happy? No? You're worried about instances where the directory is named in isolation? Well, now, as Captain Mainwaring would say, you're getting into the realms of fantasy...

Fixing up alien text files is not a perfect science but, by this stage, you should be beginning to see how **Find/Change** can make it 99% perfect.

Wrong characters

It's not much harder to fix characters that have translated wrongly, either. Long dashes (the 'em' or 'en' dashes), typographical quote marks and ellipses are the top three offenders. To fix these, you have to identify them in the text and replace these characters with the correct ones. See the 'Typographical marks' margin note for the key combinations that you'll need for the most common characters.

But there's a problem. Many bizarre characters are hard to find on your keyboard. How do you type them into the **Find/Change** dialogue? You copy them from the document and paste them in. Sometimes the character is so alien that the Mac represents it as a square (which usually means 'I don't know what this is, but here it is anyway'). Even then, the **Find/Change** dialogue in most applications can strip it out of the text, and even distinguish it from other unidentified 'squares'.

Unwanted carriage returns

Unwanted and incorrect characters are easy to delete or replace, but unwanted carriage returns are a problem. Many applications use the '\p' combination to indicate a carriage return in the **Find/Change** dialogue, but if this doesn't work, you can copy and paste it in. The real problem is stripping out unwanted carriage returns, while leaving in those that ought to be there.

You get round this using the basic principle of intelligent finding and changing – spotting unique combinations of characters. For example, it's common to get a so-called ASCII file from a PC that has a carriage return at the end of each line as it was originally formatted in the author's software. Wherever the author set their right margin, the file has a carriage return.

You can't strip out every carriage return in the document, because you need to keep those that separate one paragraph from the next. This is where you need to study the text closely. In the case above, the unwanted carriage returns are put between words without deleting the space that was already there, whereas there will usually be no space either side of the 'proper' returns. So if you do a **Find/Change** that strips out the combination 'space' -'return' (in your dialogue it will probably look like ' \p'), the proper returns will survive. This may not always be 100% reliable. If the author is a bit of a sloppy writer, and occasionally leaves a space before a paragraph return, you're going to lose it. That's life.

Sometimes you'll get a file where there isn't a space either side of the bogus returns. What do you do then? Take a look at the real carriage returns between paragraphs. Do they come two at a time instead of one at a time? Thought so. This is another commonly-encountered 'tricky' file, and the solution is to make use of an additional step in the process. You can't simply strip out all the carriage returns, so instead you first replace the double-return combination (between paragraphs) with some combination that wouldn't occur naturally in the text – '&&&' for example – then replace all the remaining carriage returns with a single space, and replace all the instances of your made-up character combination with single carriage returns. Cheeky but effective. That innocuous little **Find/Change** dialogue is a powerful weapon against the rampaging forces of chaos... well, against text files from an alien race at least. (Well what else would you call people who choose to use a PC?) **MF**

MUST DASH

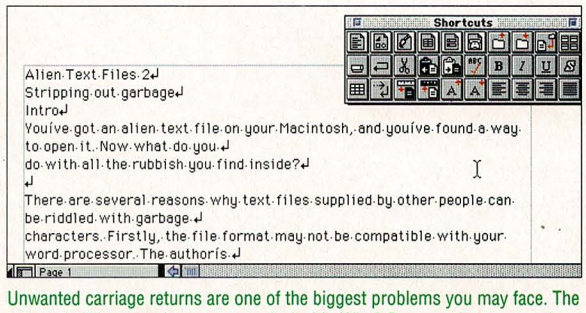
Most writers fail to use proper 'en' dashes for punctuation. How do you distinguish punctuation dashes from hyphens to do a global **Find/ Change**? Simple. Punctuation dashes have a space either side. You simply replace ' - ' (that is space hyphen space) with ' – ' (space dash space).

TOP THREE FIND/CHANGE TIPS

■ **Be unique.** Before you do a global **Find/Change**, look for combinations of characters that are unique, and couldn't also form parts of legitimate words or phrases.

■ **What a character.** If you don't know how to type a weird character into the **Find/Change** dialogue, simply select it in the file, copy it, and paste it in. Even if nothing shows up, the chances are your word processor can still recognise it and work with it.

■ **One step at a time.** If characters you don't want form part of combinations that you do want (when getting rid of carriage returns, for example) use separate steps. Convert the characters you want to save to something unique; destroy the offending combination; convert the wanted characters back.


Shortcuts
Alien Text Files 2
Stripping out garbage
Intro
Youve got an alien text file on your Macintosh, and youve found a way to open it. Now what do you do with all the rubbish you find inside?
There are several reasons why text files supplied by other people can be riddled with garbage characters. Firstly, the file format may not be compatible with your word processor. The author's
Page 1

Unwanted carriage returns are one of the biggest problems you may face. The returns in this example are easy to deal with. Why? Because the unwanted ones have a space in front of them, but the proper ones don't...

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Knowledge is power

Databases aren't just for storing information, they're good at retrieving it too. Rod Lawton explains how to get precise information out of your system...

So far in this series we've shown you how to create a personal information manager using your database application, and how to isolate record types and search for data. This issue we show you how to carry out more sophisticated searches, and retrieve the information you want.

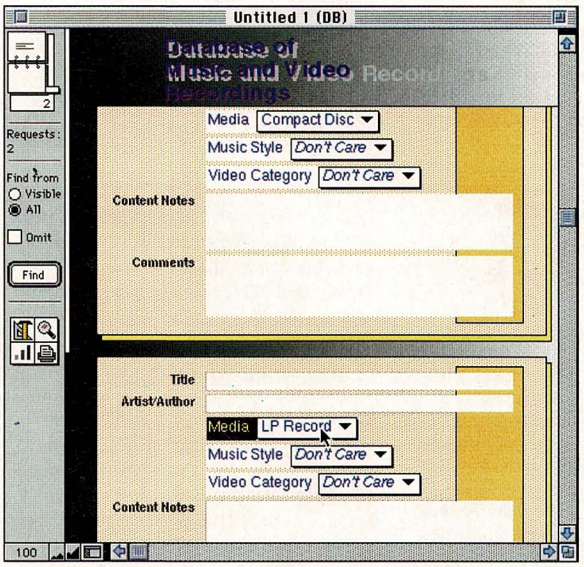
There are several ways of searching for specific records (the virtual file cards that your database uses to store information, in the form of fields). When you look for records, your database application picks out any that match what you've asked for. If you want an individual record, you must be as specific as possible. How? By choosing search criteria that narrow down the options.

You do this via the **Find** dialogue. This mirrors the layout of your records – except that all the fields contained within it are blank. To find John Smith in Doncaster, you type **John** into the first name field, **Smith** into the surname field, and **Doncaster** into the town field. This establishes three criteria: the records found must be for people with the first name John and the second name Smith who live in Doncaster. But you can do more than find single records. Instead of searching specifically for the record of John Smith in Doncaster, you could search for all of your contacts in Doncaster, or for all contacts called Smith in Doncaster, or for all contacts called Smith. Leave a field blank, and your database ignores it when searching, enabling you to widen your search. Once a search isolates a number of records, these act as a mini-database on their own, which you can browse through – you won't see the other records until you choose to display them again.

Not only, but also...

You want more flexibility? You've got it. While you can narrow down searches by specifying additional criteria, you can also extend them, so that you include records where either one criterion or another matches. So, you could carry out a search for contacts in either Doncaster or Huddersfield, for example. You accomplish this by undertaking repeated Find requests – once you've specified your first set of criteria, you make a new request (using the **Edit** menu in *ClarisWorks*) and your application will then find and display both sets of records in a single action.

It's possible that you will frequently find yourself specifying the same search criteria over and over again – unpaid invoices from a particular client, for example. You don't have to keep typing the necessary information into the **Find** dialogue, though, because *ClarisWorks*, *FileMaker Pro* and several other database applications can save requests as automated tasks. We showed you how to do this back in MACFORMAT 34.



If you want to find records where one criterion or another matches, you need to use a repeat request. This displays two views of your records – or as many as the number of repeat requests you need. Here is a search through a music database for both CDs and vinyl LPs.

Leave it out!

But what if you want to find all your contacts *not* in Doncaster? Perhaps you made a trip up there last week and visited them all? Easy. When you specify search criteria, you can elect to either display the records that match them – the default – or omit these matching records and display the rest. This is useful when, for example, you want to rule specific contacts, towns or companies out of the equation.

The really useful stuff, though, is done with *relational operators*. This sounds like tedious programmer-speak, but the concept is simple. When searching for records, you don't have to specify an exact value for the data to match – for example, you could search a list of invoices for amounts greater than £1,000. In *ClarisWorks* you would do this by typing **>1000** into the **Amount** field. You could isolate invoices for amounts lower than £500 by typing **<500** into that field. To find all invoices between those two figures you would first find all invoices over £500, then select those below £1,000 from the subset of records generated by the first search. *FileMaker Pro* makes it easier still by having having an operator that identifies values within a certain range: in

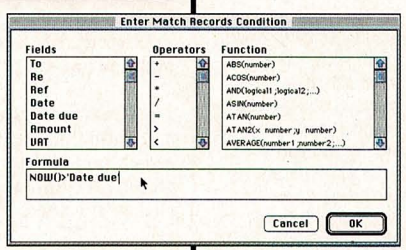
COPYING FOUND SETS

You can copy the data that you get from performing a search straight to the Clipboard, and from there into other applications such as spreadsheets.

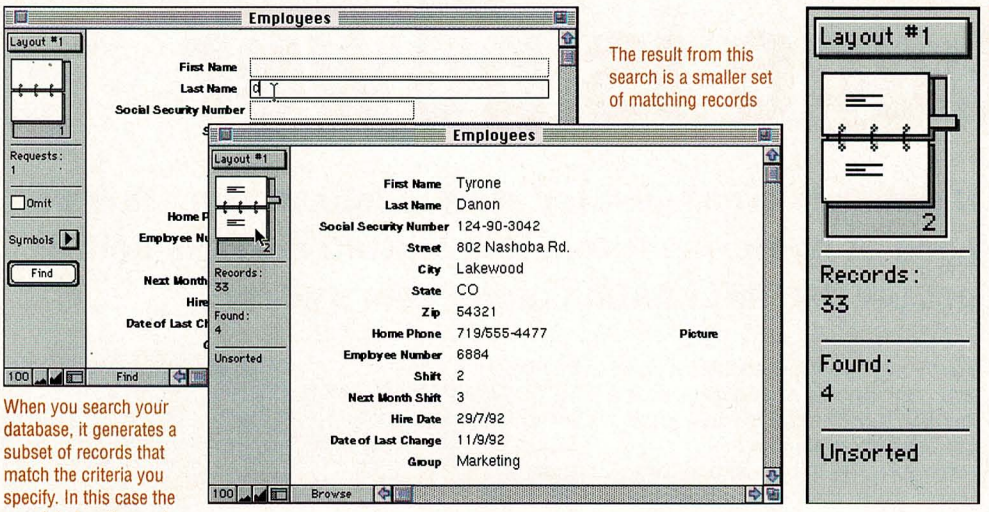
Continued on next page

FINDING VS. MATCHING IN CLARISWORKS

When *ClarisWorks* **Finds** records, it hides those that don't match the criteria you have specified. When it **Matches** records, it leaves the others visible. Matching is used for more complex searches and makes it easier to apply conditional and relational operators to specific fields. Matching enables you to carry out calculations on different fields in a record to check if that record meets your specified criteria. For example, you could look for all invoices where the individual invoiced items had an average value above a certain level – even though there might not be a field that calculates that in the records. The **Match** formula for this might look something like: **AVERAGE(Job 1;Job 2;Job 3)>1000**. This picks out all invoices where the jobs have an average charge of £1,000 or more. You could also use multiple criteria with the conditional operators to dig out all records where the average job charge was £1,000 or over *and* the client was in Doncaster. There isn't a similar feature in the more powerful *FileMaker Pro*.



As well as the standard **Find** functions, *ClarisWorks* enables you to match records using complex formulae. Here, you are looking for all invoices whose due date is earlier than the current date. Although formulae can be pasted in from the scrolling boxes, you do need to be a bit of a wirehead to get this deep.



When you search your database, it generates a subset of records that match the criteria you specify. In this case the search is for all records where the surname begins with D.

The result from this search is a smaller set of matching records

Note from the Status area that out of 33 records, there are four **Found** records. You can now browse these on their own without seeing the others.

EACH TO HIS OWN

The menu options, program features and syntax quoted in this series are based on *ClarisWorks* and *FileMaker Pro*, the two most commonly-used Macintosh database applications. However, the general principles and most of the features apply to all database applications, and even to those on different platforms.

WHICH FIELD?

In the examples we frequently refer to the Date field or the Town field. Your database may contain totally different field information, depending upon the use for which you designed and constructed it.

MORE...

Previous instalments of this series, which show you how to construct and get the best performance out of your database, are available in issues 26, 27, 30, 33 and 34 of MACFORMAT. These include basic use for information management, database creation, how to make your personal information manager more visually appealing and how to speed up the whole process of information searches. For more information on how to complete your collection of database information, turn to page 115.

this case you would put **500...1000** into the **Amount** field. More information on the different relational operators that are available to use in *ClarisWorks* and *Filemaker Pro* is contained within the 'Relational operators' box.

All or nothing

There are still more types of search that you can undertake. If you type text into a field in the **Find** dialogue, the application will, by default, select records where that field contains the text you specified. This means if you search for Bill in the **Name** field, the program will also find people called Billy. If you want to restrict the search to records where the contents of the field exactly match what you asked for, you should use the = (equals) operator: for example, in the name field type **=Bill** and you'll get no 'Billy's.

You can also search for records where specific fields contain no information, simply by typing = into the related field. This is useful when you want to find what information is missing from your records – for example, which hot new business contacts you are short of information on, or whose phone number appears to be absent from your database.

Getting it right

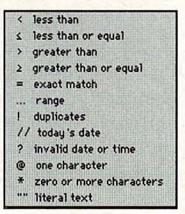
When you design a database you need to put a lot of thought into the information you're going to want to extract from it later. Although having to set up specific fields for specific types of information may seem tiresome and restrictive, it really pays dividends later. Databases can do more than simply recall what you once typed in – they can collate and compare information, and provide answers to the related questions you can imagine needing to ask in the future. For more information on how to plan your database to ensure that it will meet all your future requirements, see MACFORMAT 26.

Your database can also carry out calculations for you, and even automatically insert data – the current date, for instance. If it's capable of doing all this, will you ever need to use a spreadsheet again? Well, possibly not – in the next instalment of this series, we introduce you to your personal database's surprisingly powerful calculation capabilities. **MF**

RELATIONAL OPERATORS

To use relational operators in *ClarisWorks* searches, type them into the appropriate fields in the **Find** dialogue. These are the operators you can use:

= (Equal to) Use this to search for records where the contents of that field are precisely equal to what you typed into the **Find** dialogue. This is used for text fields, where *ClarisWorks* will pick out records in which the relevant field contains the text specified in your search. In the Bill versus Billy example, the field may contain more text than you are searching for.



FileMaker Pro's pop-up menu, showing the relational operators you can use.

> (Greater than) For both number and date fields. If you apply this symbol before a number, *ClarisWorks* will find records where the field contains a number or date that is greater or later than the one specified.

>= (Greater than or equal to) This is a variation on the previous operator. A search undertaken using it will also include records that match the amount or date specified.

< (Less than) This works in the same way as **Greater than**, except that this time it finds numbers or dates that are lower or earlier.

<= (Less than or equal to) Specifying this operator will include all the records found in the **Less than** search, but will also include all records with a value that matches the amount or date provided.

<> (Not equal to) This operator searches out all records where the field contains a value different from the one that you specify.

Extended operator options

FileMaker Pro also offers an extended pop-up menu of symbols for you to choose from. As well as the operators that are available in *ClarisWorks*, you get these too:

... (Range) Use this operator when you want to find records with values that are in a certain range – for example, invoices between £500 and £1,000, or dates between now and this time next month.

! (Duplicates) You can search for records with duplicate values. This is useful, for example, when you're trying to isolate invoices that have duplicate reference numbers, or when you're making sure you don't have more than one record for any of your business contacts.

// (Today's date) If you keep a database of calls that you have to make, or payments due, you can isolate the specific calls or payments that you have to take action on today by inserting the **Today** operator in the date field.

? (Invalid date or time) If your database is behaving erratically, and it uses date and/or time fields, it could be that sometime in the past you've entered data incorrectly or in the wrong format. You can make use of this operator to find such records.

*** and @ (Wildcards)** What if you know that the name of the person you want to look up begins with Short, but you don't know how it ends? *FileMaker Pro* enables you to use wildcards, so that you can simply use the * character to represent zero or any number of characters, or the @ character to represent one character.

So, if you don't know whether the person's name is Shorthouse or Shortfall, you would type Short*. If you know that it is either Shorthouse or Shorthause, you'd type Shorth@use. You can also make use of other criteria, like company or town, to narrow your search.

"" (Literal text) This search finds text exactly as it's displayed in fields – which means it includes any spaces and punctuation.

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= 4si

Authorised Reseller

Not fade away

Don't get cross if your fading doesn't sound right. Ian Waugh has some programming ideas that could help give your music a completely new dimension.

HOLLY, MY BUDDY

Buddy Holly wrote *Not Fade Away*, which the Rolling Stones recorded and turned into a hit in 1964.

FADE AWAY

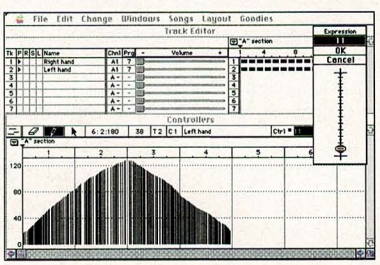
The first record to use a fadeout was Paul Anka's million-selling hit *Diana*.

If you want to make your music stand out from the crowd, you have to make it that bit more interesting. Fade and crossfade techniques can make your synthesiser or sound module produce effects you never thought possible.

Instead of having a definite ending, many songs fade out, repeating the chorus – and you can produce this effect easily using a sequencer. If it has a MIDI mixer, you can 'ride' the faders as the song plays out, and record the volume changes, preferably using Expression. Record this onto a separate track if you can – it'll be much easier to manipulate and edit as a result.

In some mixers you can link or group the faders, enabling you to fade all the tracks at the same time. If there is no Group function, fade one track, then copy the data to other tracks, changing the MIDI channel to that of the parts you want to fade. But not all sequencers have a mixer, and not all those with a mixer can record data into the sequencer. One alternative is to use a Scale Controller function, if your sequencer has one. This will generate or edit Controller data to produce a very even fade. Another alternative is to use a Graphic Controller editor, which many sequencers use to draw in the fade data.

A further option is to create a fade pattern in an Event editor, putting the events sixteenth notes apart. It may take a few minutes, but you only need do it once, then you can copy it to other tracks. Put each set of fade data for each MIDI channel on its own track again this makes it easier to edit and manipulate.



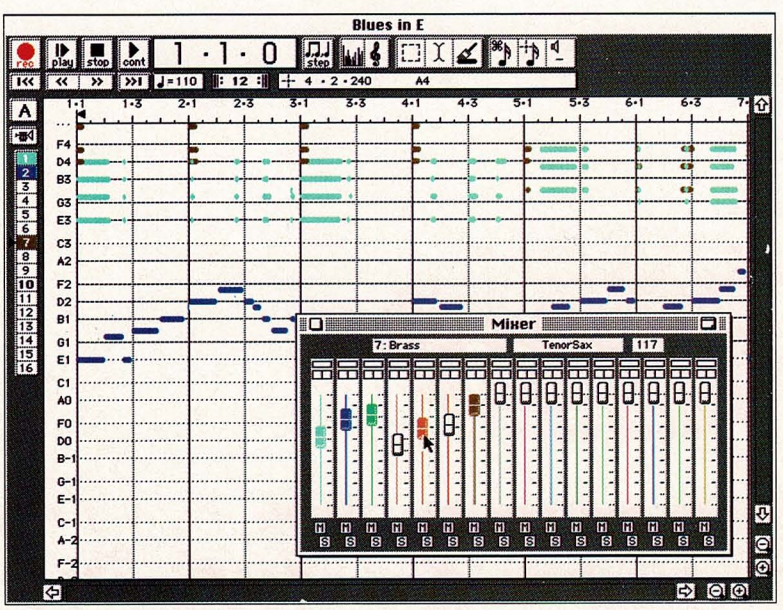
MasterTracks Pro has a Graphic Controller editor. Expression data has been drawn in with the Pencil to create a fade in and out over four bars.

The amazing morph

Once you can create fades, you can get on to the interesting stuff – creating crossfades. Some synthesisers use a system of morphing, or vector synthesis, altering the timbre or tone of a sound in real time – an impressive effect, which you can duplicate on any synthesiser using crossfades.

Record a part onto a track, copy it to another track, and set the tracks to different MIDI channels. Select contrasting sounds for each track – say, strings and piano, or sax and lead guitar. Now you have to create two fades – one to fade in track one, and another to fade out track two.

Decide how many bars the crossfade should cover and create fades of that length. If your sequencer has a Reverse function – which can handle all events, not just notes – create the first fade, copy it to another track, and reverse it. Try scaling values from 127 to 15 for the fade out, and vice versa for



The faders in the Mixer in *MusicShop* can control Volume or Velocity data. You can record Fader movements into the tracks and then mix these tracks with note data in real time.

WHAT'S A CROSSFADE?

Crossfade functions are usually built into digital audio programs. They reduce the volume of one section, while increasing the volume of a different one. The result is a smooth transition from one audio track to another. The effect is used all the time by DJs, usually riding the faders on a mixing desk to fade out the end of one record, while fading in the beginning of the next. Sequencers don't have this function, but you can create your own...

VELOCITY, VOLUME AND EXPRESSION

MIDI has three parameters that can change the volume of a note: Velocity, Volume and Expression. Expression is Controller 11 and Volume is Controller 7. Increasing or decreasing the value of either will change the volume of the sound, so what's the difference?

Think of Volume as the overall master setting and use it at the beginning of a piece to set the volumes of each part. If you want to make volume changes, or create crescendos during the course of the music, use Expression.

Why? Well, let's say you used Volume to create a crescendo, and when the piece was finished you realised that the part was too loud in relation to the other parts. You'd have to manually re-do the crescendo. If you use Expression, you can simply change the initial Volume setting and then all the peaks and troughs created with Expression remain proportionally the same.

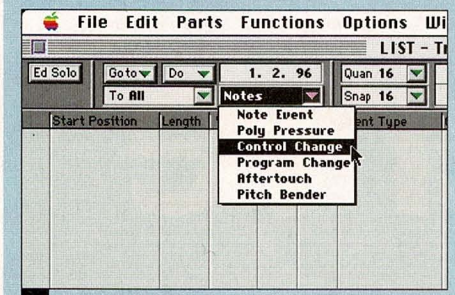
Velocity

Velocity data is part of the note data, along with pitch and MIDI channel. The Velocity value is generated when you press a key on a keyboard – the harder or faster you press it, the greater the Velocity and the louder the note is. At least, that's the way Velocity is usually used.

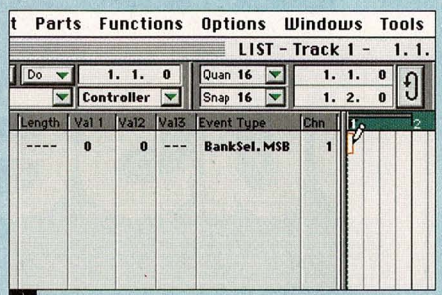
However, Velocity can also affect the tone. It's often used with brass and woodwind sounds to create a rasp or overblown effect. If you use Velocity to control the volume of a sound, this may also affect its tone. So, if you want a raspy trombone, but at a low volume, use plenty of Velocity but reduce the volume using either Expression or Volume.

PROGRAMMING A FADE

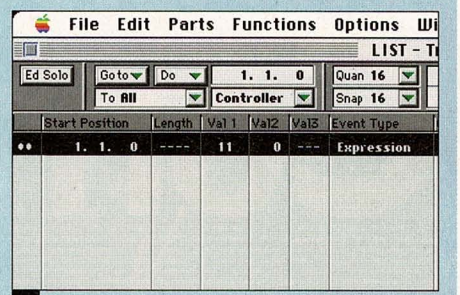
Follow this example to find out how to enter fade data into a sequencer's event editor. This example uses Steinberg's *Cubasis*, but the principle is the same for all.



1 Select or create a new track and enter the event editor. This is *Cubasis'* List editor. Select the type of Controller data you want to enter – Control Change.

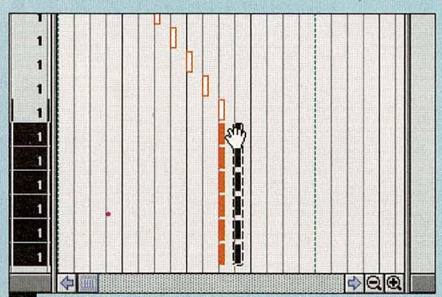


2 Insert a Controller event. We're using the Pencil tool to click it into the display window. This editor automatically enters Controller 0 which is Bank Select so...

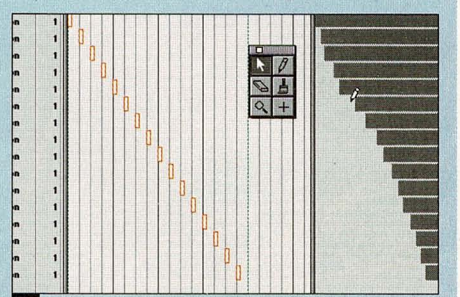


3 ...select the event and change it to Controller 11 – Expression. If you want to use Volume data instead, change it to Controller 7. Select the event and copy it.

4 Paste the event into the editor several times. Each event will probably have exactly the same position – in this case, 1.1.0, right at the start of the track.



5 Adjust the time positions of the events to spread them across the number of bars the fade is to effect. Here we're dragging the events en mass in the display area, leaving one and dragging the rest, and so on.



6 Finally, adjust the Controller values to create a fade. They are shown numerically in the Val2 column and range form 127 to 15. In *Cubasis* you can adjust the values numerically by clicking and dragging with the pencil in the display window on the right.

the fade in. If you want the sound to fade completely, drop the value down to zero. The values that give the best results will vary according to the sounds you are using.

If you have a pattern-based sequencer, drag the fade patterns to the area where you want the crossfade to occur. If you haven't, you'll have to adjust the timing of the events to move them to the right place. Try the crossfade on one long chord and see how it changes from one sound to another. Try it, too, with a melody line. You can produce some interesting effects by making the sound crossfade every couple of bars.

Multi fades

Having mastered crossfading with two sounds, what's to stop you crossfading between three or more? You can set up the fades in various ways – make the sounds take turns to fade in and out, or stagger the fades so that the three sounds are at different levels throughout the piece.

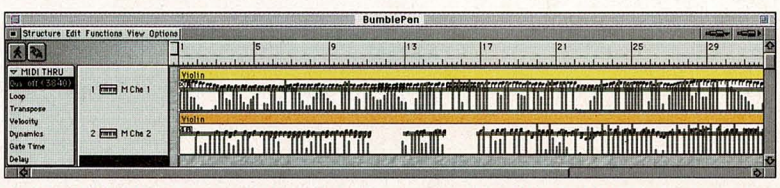
The fades don't have to be the same length, either. One sound could fade in and out every two bars, another every three bars, and the third every four bars – cycling the crossfades every 12 bars. Using different values you can create complex crossfades that last much longer.

Pan crossfades

You could also use Controller 10: Pan. This places a sound in the stereo image, so you must use your sound module's Stereo Outs to hear it. A value of 64 places the sound in the middle of the stereo field, while 0 pans it hard left and 127 pans it hard right.

If you have already created a volume fade, change the Controller number to 10. You can do this quickly if your sequencer has a Transform function; otherwise do it manually – it won't take long. You now have a ready-to-go pan effect. Set it to the same MIDI channel as a music line and see what it sounds like. Dynamically panning a single music line across the stereo image while the accompaniment remains static can be very effective.

Here's another suggestion: try combining crossfades with dynamic panning. You can set this up in several ways. For example, when the two crossfading sounds are at the same volume, have them both in the middle of the stereo field. As they crossfade, pan one to the right and one to the left. Alternatively, offset the pan positions in relation to the crossfades, so each time the two sounds are at the same volume level, they meet at different places in the stereo image. When you have created some good fade tracks, save them – you can load them and use them in other songs. **MF**



The *BumblePan* file as it appears in *Logic*. From here you can see that the Pan data is visible below the notes, throwing the tune from side to side as it plays.

UNDER CONTROL

MIDI has provision for 128 different types of Controller message. Most have been allocated a function, but there are still over 40 which have not yet been officially 'defined'.

SEQUENCER ROUND-UP

Prices:

Steinberg's *Cubase*	£399
Steinberg's *Cubase Lite*	£ 99
Steinberg's *Cubasis*	£129
Emagic's *Logic*	£399
Emagic's *MicroLogic*	£99
Passport's *MusicTime*	£129.95
Passport's *MasterTracks Pro*	£149.95
Mark of the Unicorn's *FreeStyle*	£149
Mark of the Unicorn's *Performer*	£349
Opcode's *MusicShop*	£149.95
Opcode's *Vision*	£349.95
Opcode's *EZ-Vision*	£ 99.95
OSC's *Metro 3*	£199

Contacts:

- Steinberg: Harman UK on 0181 2075050
- Emagic: Sound Technology on 01462 480000
- Passport: Arbiter on 0181 970 1910
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MAC ANSWERS

Well, poke a LocalTalk cable in my eye and call me a V.34 modem, the MACFORMAT experts are back to solve your Mac problems. Gratis. What more could you ask?

Welcome once again to MacAnswers, the part of MACFORMAT dedicated to answering your Mac questions. If you have a query, simply fill in the form on page 72 and send it to us, or e-mail us at **macformat.futurenet.co.uk** including 'MacAnswers' in the subject title. Sorry, but we can't reply personally, or answer technical questions over the phone – we're too busy trying to work out the microwave.

The Mac fitness plan

DISK REPAIR

Q *To keep my 8100/80 humming along happily, I perform a monthly routine. I run a* SAM *virus scan and* Norton Disk Doctor, *then optimise the hard drive. I also rebuild the Desktop and zap the PRAM (using* TechTool). *Are there any advantages to doing these in a specific order?*
Steve & Catherine Seitz
via e-mail

A Yes, there are. You should run your virus program first, in this case *Symantec AntiVirus for Macintosh.* Although Mac viruses aren't that common, you can never be too careful, especially if you are connected to the Internet. Running this first ensures the rest of your routine isn't affected by any rogue software your Mac might have picked up.

Next, run *Norton Disk Doctor* to check your hard disk's logical file structure (its 'book-keeping'). It's important to fix any errors here before you defragment your hard disk, otherwise your Mac may misplace files when you run your defragmentation program. Next, restart your Mac and rebuild the Desktop by holding down **[command]** and **[option]** during startup. This forces your Mac to go through all its files, re-cataloguing them, which reduces the size of the Desktop files and makes windows open quicker.

Next, run your disk defragmentation program – you're probably using *Norton Speed Disk.* Doing this after rebuilding the Desktop means the program doesn't waste time defragmenting Desktop files that are about to change completely.

Lastly, you can 'zap', or clear, the PRAM (Parameter RAM, a small memory chip in your Mac powered by a battery), but there's really no need. The PRAM stores certain details about what hardware is connected to your Mac, where the startup disk is, Control Panel settings, time and date. Clearing the PRAM (by holding down **[command] [option] [P] [R]** on startup) isn't a preventative measure; it's just something to try when your Mac starts acting funny. It's like changing the fuse in a plug – you only do it when something isn't working.

Virtual jerk

RAM DOUBLER

Q *I recently purchased an Apple CD 600e CD-ROM drive. When running CD-ROMs, I'm told to switch off virtual memory in the Memory Control Panel, but when I go to do so, virtual memory is already switched off. How do I cure this? Sound and movies from CDs are jerky.*
Micheal Parkes
Newbold-on-Avon, Rugby

A Your problem stems from the fact that you are using *RAM Doubler.* This brilliant Extension fools your Mac into thinking it has twice as much memory as it really has, but one of the ways *RAM Doubler* achieves this is by using its own form of virtual memory, which causes jerky playback of sound and movies from CDs. The only way to get round this is simply to turn *RAM Doubler* off whenever you want to use a games or multimedia CD in your CD-ROM drive.

The Red Cross

VARIOUS

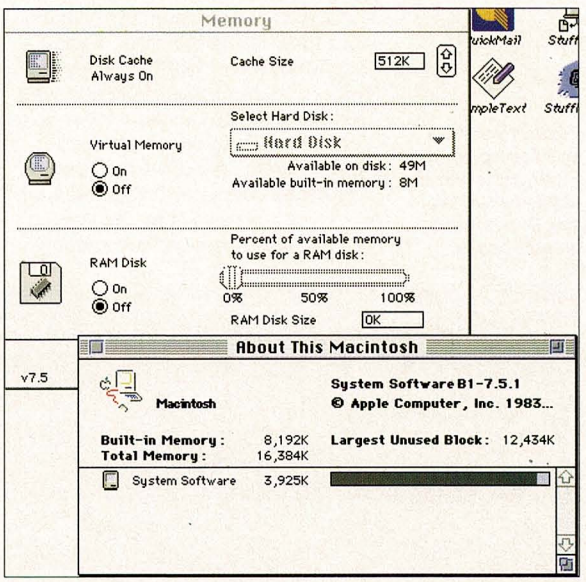
Q *1. A red cross appears on my Finder icon during startup – do you have any idea why? This has been happening for a while now and I can't find the cause.*
2. My screen regularly appears black and white on startup. After much investigation, I have discovered this to be caused by a corrupted Parameter RAM, which I can solve using TechTool *– but why should it happen so often?*
3. Can you explain the advantages of partitioning my hard drive?
4. What is the difference between Performa System software and the 'normal' version?
Robin Gill
via e-mail

A 1. The icons that appear at startup represent Extensions and Control

Continued on next page

FREE SOFTWARE!
The issue, *TechTool* has cropped up a suspicious number of times. This fab piece of free diagnostic software is on the Cover CD this issue.

'Internet types no 6: Mr Angry'



Turn virtual memory off to get smooth playback from CDs. Hang on a minute, it isn't switched on! Ah, that's a *RAM Doubler* problem then. See 'Virtual Jerk'.

STATIONERY PAD

Under System 7 or higher, you can create a document to use as a template for new documents and click the Stationery Pad button to turn it into a template. Double-click a Stationery Pad and you are presented with a small dialogue box asking where you would like a new file to be created and what you would like to call it. Clicking OK then opens a new file with the same settings as the Stationery Pad. If it's a text file, for instance, the new document contains exactly the same text as the original. Any changes you make to this new document do not affect the original – so it's handy for creating multiple documents with only minor differences, such as invoices.

THE DO-IT-YOURSELF PROBLEM SOLVING GUIDE

This issue, we take an in-depth look at the information presented in the Finder, and how to use it. There's a lot of useful information here, if you know what it all means. You can use the information presented in the **About...** dialogue and the **Get Info** box to solve odd memory or file problems that crop up. When you write in to MacAnswers, always include the information contained in the **About this Macintosh...** dialogue – it helps us to help you.

You can solve most problems fairly easily without any additional software.

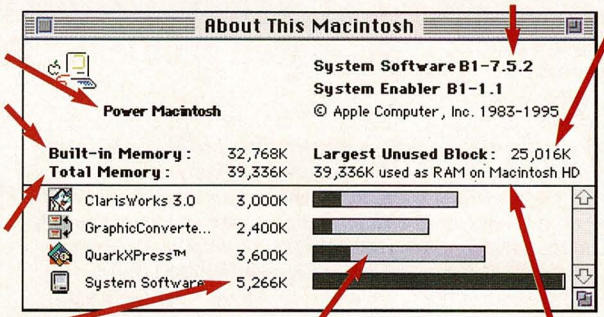
If you have a problem, there are a few things to try, in order of priority:

1. Restart your Mac.
2. Restart your Mac with Extensions off (hold down **[shift]** during startup).
3. Rebuild the Desktop (hold down **[command] [option]** during startup).
4. Shut down and disconnect any SCSI devices connected to your Mac, if you have any, then restart.
5. Zap the Parameter RAM (by holding down **[command] [option] [P] [R]** together during startup).
6. Reinstall the System software – make a backup of your hard disk first!

You should clear 90% of your Mac problems before you get to number 6. If none of these works, or the problem relates to a particular peripheral (such as a printer or modem), then get in touch with the dealer who sold you the equipment or software. Alternatively, write in to us, making sure you give us full details of your system, including any additional hardware and software you have installed.

The About this Macintosh... box

At first, this box might not seem that useful. It shows which applications are running and how much memory they each take. Look at little closer, and you'll see that the About... box gives you much more information about your Mac itself.



System software version. The version of System software installed on your Mac, comprising System File, Finder, Control Panels, Extensions, fonts, and some sounds. If a System Enabler is present, its version is displayed beneath.

Mac Model Your Mac's name. Owing to a System 7.5 bug, this might not display your particular model.

Built-in memory The amount of physical RAM installed in your Mac. RAM comprises SIMMs (or DIMMs in the new PowerMacs) – circuit boards that plug into slots on your motherboard.

Total memory The total amount of memory available to run your Mac's Operating System and any applications, including virtual memory.

Largest unused block. For application use. Because of the way your Mac organises its memory, this figure is usually, although not always, the total amount of RAM less the amount of memory taken up by the System software and any applications you are running.

Memory allocation The amount of memory allocated to each application – there's also a figure for System software. System software is always running, and can resize its memory allocation on the fly. You can't yet do this with applications – you have to quit, change their memory allocation in the **Get Info** box, then relaunch them.

Memory usage bars These display how much of the memory currently allocated to each application is being used by that application. This is useful when memory is tight and you need to reduce the amount of memory you allocate to an application in the **Get Info** box. The total length of the bar is the amount of memory allocated to the application; the dark section is how much it is using; and the light blue section is how much it has reserved.

Virtual memory On most Macs with System 7 or higher, you can use a portion of your hard disk space as working or 'virtual' memory, but it is a lot slower than real memory. This tells you how much disk space is currently being used as virtual memory.

Panels that are loading. However, the Finder icon you describe does not represent a 'Finder' Extension, so what I suspect you are seeing is a Finder Update Extension of some description. Apple has produced a number of these over the years for minor system software upgrades and bug fixes.

The red cross over the icon means that it cannot load. It may be clashing with one or more of your other Extensions, so try disabling all other Extensions by dragging them out of the Extensions folder within the System Folder and into a plain folder on your Desktop, then do the same for your Control Panels folder. If this doesn't work, then the Extension in question is either not designed for use on your Mac, or is not needed by the version of System software you are running.

TechTool can rebuild your Desktop, zap your PRAM, and tell you all about your Mac for free. Sounds like an absolute bargain.

2. An interesting problem. On first glance, I'd say that the battery that powers the PRAM is about to die. When power to the PRAM is lost, usually because the battery runs out of juice or has been removed, your Mac defaults to its original factory settings. In your case, this means a black and white display. Some of your Control Panel settings may vanish as well. If, however, the only symptom is the change of monitor depth, then the actual PRAM may be damaged.

In either case, you can't fix the problem yourself unless you're a dab hand at technical stuff, so either call an engineer or lug your Mac to your local Apple Authorised dealer, who'll repair it for you. If it's a straight battery swap, this will cost £20 to £30. If the PRAM is damaged, however, things will get more expensive, and you should get a quote for the work before it's carried out.

3. Partitioning your hard drive is a way of getting more than one 'volume' out of your hard disk. A volume is like a container for information. You can partition your hard disk into many smaller volumes, or, as is usually the case, into one big volume.

Before you jump for joy, the sum capacity of the volumes on your hard disk cannot exceed the total capacity of the drive itself – which means that you're not getting any extra storage space. The benefit of splitting your hard disk into more than one volume is that if something goes wrong with your Mac's internal hard drive, it usually only affects one partition. If you keep your System Folder on a second partition, nine times out of ten you'll still be able to start up your Mac. It's up to you whether this is worth reformatting your drive and adding extra partitions. Most people get by with the standard single-volume arrangement.

4. Apple produces two versions of its Operating System: one for the Performa series, and one for the rest. The Performa system is a cut-down version of the full Mac OS, but you'll be hard pushed to find any difference – you get fewer Extensions and Control Panels, and your System File is slightly smaller. You can use the Performa version of the Mac Operating System on any Mac (and vice versa) providing you have the correct System Enabler – it's a little file that tells the Mac OS exactly what hardware your Mac has.

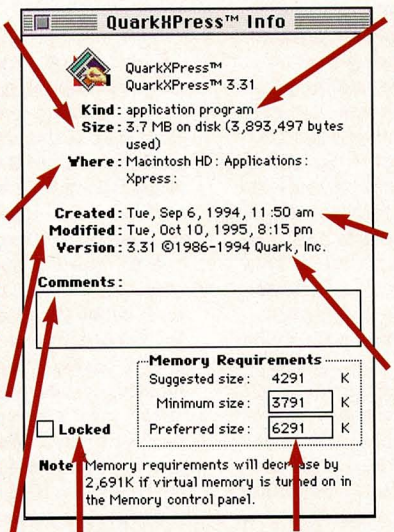
Conflict of interests

EXTENSIONS

Q *Having read your informative and helpful booklet* The Alternative Mac

The **Get Info** box

The **Get Info** box in the Finder provides you with information about individual files and applications on your Mac. You can also use it to resize an application's memory allocation, to solve memory-related problems. To see the **Get Info** box, highlight the file you want to know more about in the Finder, and choose **Get Info** from the **File** menu (or just hit **[command] [I]**).


QuarkXPress™ Info
QuarkXPress™
QuarkXPress™ 3.31
Kind: application program
Size: 3.7 MB on disk (3,893,497 bytes used)
Where: Macintosh HD: Applications: Xpress:
Created: Tue, Sep 6, 1994, 11:50 am
Modified: Tue, Oct 10, 1995, 8:15 pm
Version: 3.31 ©1986-1994 Quark, Inc.
Comments:
Memory Requirements
Suggested size: 4291 K
Minimum size: 3791 K
Preferred size: 6291 K
Locked
Note: Memory requirements will decrease by 2,691K if virtual memory is turned on in the Memory control panel.

Size
The amount of space the file takes up on disk. The figure in brackets is the precise number of bytes used to store the file: 1K = 1,024 bytes, 1Mb = 1,048,576 bytes.

Where
The file pathname. This starts with the disk the file is on, then gives a colon-separated list of each folder you have to go through to reach it.

Modified
The date and time the file was last changed. Handy if you have more than one version of a document on disk.

Comments
Type in your comments here. These are not saved with the file, but in the Desktop files that your Mac uses to keep track of files on disk. If you rebuild the Desktop, by holding down **[command]** and **[option]** during startup, they will be lost.

Locked check box
Locks a file, so that changes can't be saved to it – if you don't want to accidentally delete or overwrite a file. Locked items are not deleted when you empty the Wastebasket.

Memory requirements
Only appears if the file type is an application. Three fields here relate to how much memory the application is allowed to use. First is the suggested size, set by the programmers. Second, the minimum memory the application will run in. You can increase this if you want the application to reserve itself a larger minimum chunk of memory – handy if you habitually open large files. Third, the preferred amount of memory – the maximum chunk of memory the application may use. Depending on how much memory you have, the application always reserves something between the minimum and preferred figures.

Kind
The file type – here it's an application. There are three types of file: applications, documents, and aliases. An alias points to a document or application.

Created
The date and time the file was first created, or the application was first installed.

Version
The version number of an application or application-related program. Relates to the file you see in the **Get info** box.

Manual *from* MACFORMAT *33, I have a couple of questions. On page 50, in the picture of the Control Panels window, there is a Control Panel called Conflict Catcher. What is this, and where can I get it? On page 53, in a picture of the Extensions Manager window, there is an item called Conflict Extension. Are these two related?*
Terry Eldred
Pitsfod, Northampton

A *Conflict Catcher* is a commercial program that works along the same lines as System 7.5's Extensions Manager. It enables you to isolate problematic or unwanted Extensions and Control Panels, during or prior to a restart. *Conflict Catcher* is much more sophisticated: it identifies the Extensions causing problems and isolates them for you. It comes in two parts: a Control Panel that enables you to customise which Extensions are installed on restart, and an Extension that does all the work when your Mac starts up. *Conflict Catcher 3* costs £81.08 from Softline (0181 401 1234).

Invalid what key?

CORRUPT DISK

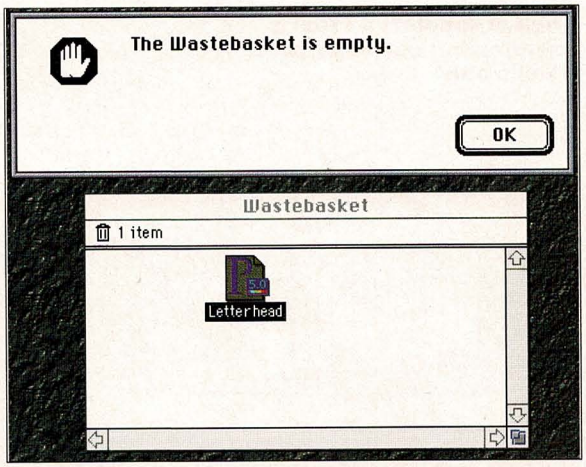
Q *Help! I cannot empty my trash! My Quadra 610 says that it cannot find the files in the Wastebasket to empty it. Also, when I use* Mac Check, *it reports an Invalid Index Key 4,961.*
Leta Hendricks
via e-mail

A Oh dear, this could be serious. The directory structure on your Mac's hard disk is damaged, and your Mac can't find any reference to the files in the Wastebasket – so it can't delete them. The only way to fix this without reformatting your hard disk (and losing all your files) is to use a disk repair program such as *Norton Utilities*. Even then, you may not be able to get the particular files back – but since they're in the Wastebasket, that probably isn't a problem. The fly in the ointment is that the damage to the directory structure may extend further than just these files, so a rapid backup of your entire hard disk would be a good idea.

Fill me in...

ICONS

Q *Not long after I upgraded my Quadra 660AV from System 7.1 to System 7.5 all my folder and file icons changed to outline form with a white body. I've tried rebuilding the Desktop and resetting the PRAM with* TechTool, *and I've checked the hard disk using* Norton Utilities *and* MacTools Pro. *None of these shows any problem with my hard disk, and all my icons stay in outline form. Can you help me get those normal 'filled' icons back?*
Bill Chan
via e-mail



It's rare for your Mac to lose track of its files, but it's even rarer to get an error message that makes any sense. See 'Invalid what key?'

A We've run into this problem before on some Macs running System 7.5, and we haven't pinned it down to a particular area. We have found that upgrading to System 7.5.1 solves the problem. We included the upgrade on the MACFORMAT 27 Cover CD (see page 115 if you missed it), or you can get it on floppy disk or CD-ROM from the Apple Upgrade Centre for a fee of £15. Call 0181 730 2828.

If you have already upgraded to System 7.5.1, and you're still experiencing this problem, reinstall your System software. Make sure you perform a 'clean install', which creates a brand new System Folder rather than just updating the old one. To do this, press **[command] [shift] [K]** in the main screen of the installer, and you'll be asked if you wish to install a new System Folder. This forces the installer to ignore the current System Folder, and create a new one instead, which can solve odd problems such as the one you've encountered.

Finally, if that doesn't work, your last recourse is to try throwing your Preferences folder from the System Folder into the Wastebasket (make a copy of it first if you like), but don't empty the Wastebasket just yet. Do a restart and zap the PRAM by holding down **[command] [option] [P] [R]**. Keep the keys held down until your Mac has chimed three times, then let it start up as normal. This is the most effective way of clearing the PRAM. Your Mac will then look in the Preferences Folder to see what settings it should use, but it won't find any preferences for anything, and it should default back to its factory settings – with luck resulting in the return of your normal icons.

QUICK PRINT
You can print a document out quickly by highlighting its icon in the Finder and pressing **[command] [P]**. Your Mac launches the application that created it, prints the document, then quits the program for you.

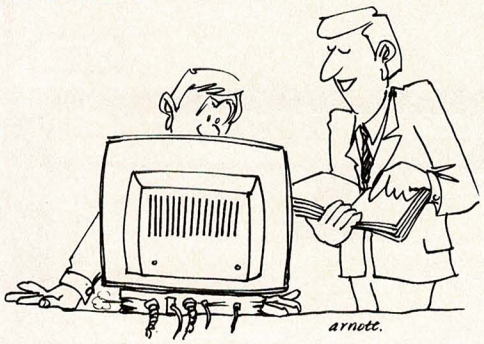
The slow bit

THE INTERNET

Q *I have a 14,000bps modem, so why am I only getting data transfer rates of (at most) 2.4K per second in applications*

Continued on next page

'Well, it supports a 15-inch monitor, but obviously not a 15 kilo one.'



QUICK FORMAT

If you have a floppy disk you want erase, hold down **[Command] [Option] [Tab]** when you insert the disk into your Mac. As soon as the disk icon appears on the Desktop, your Mac asks if you want to erase it.

such as Netscape *and* Anarchie? *Is there something drastically wrong with my modem or comms package, or is it caused by the vagaries of the Internet bandwidth? I might be more tolerant of such slow rates if I were downloading files from overseas, but I try to source my data from the UK!*

James Dore
via e-mail

A You've answered this one yourself. Although you have a fast modem, you won't get file transfer rates over the Internet at anything like the speed your modem can receive at. The Internet is made up of millions of computers, each of which is sent data via a special computer known as a router – a computer that works out which direction to send packets of information. Files are split into small information packets, which are then routed through the Internet back to your Mac and re-assembled. The advantage of this method is that routers aren't tied up for ages sending just one file to one user, but many files to many users at once. Information packets destined for your Mac are passed from router to router until they land at your PoP (Point of Presence) on your service provider's server.

The Internet is a busy place, with many thousands of people connected at any one time, which means that nearly every router is sending packets of information here, there, and everywhere. It's highly unlikely that you will ever get a router to yourself – and even if you did, it would be only one of a chain of many. Even downloading files from a UK site means having to go through a couple of routers. This means that, at present, you probably won't be able to get a transfer rate much over 2.4K per second. So what's the point in having a fast modem then? Well, the speed is invaluable in transferring files from your Internet server down the telephone lines to your hard disk. The slower this connection, the longer you spend online and the higher your phone bill.

You can speed things up slightly by downloading files at particular times. The majority of Internet surfers are in the USA, so it's a good idea to download stuff when everybody the other side of the pond is tucked up in bed – which means downloading files first thing in the morning.

And finally...

COLOR IT!

Q *I was delighted with the free version of* Color It! *that came on the* MacFormat *31 Cover CD. I now have a library of files and wish to print some of them. However, when I attempt to do this,* Color It! *quits with a Type 1 error. What am I doing wrong? I'm running an LCIII with 4Mb of RAM.*

Cameron Queen
Blairgowrie

A Error Type 1 means you don't have enough memory. There are a couple of things you can try to fix it. First, play with *Color It!'s* memory allocation in the **Get Info** box in the Finder. Try giving it slightly more memory first – it might be crashing because *Color It!* needs more memory.

If this doesn't work, try giving *Color It!* less memory, making sure you don't set it below the minimum requirement for *Color It!* (otherwise your Mac will crash). Giving an application less memory leaves more for the System to 'grow' into. When printing, the application usually hands all the information over to your Mac's Operating System to send it to the printer, so at this time the System tends to require more memory than usual.

Alternatively, you could try turning Background Printing on in the Chooser. This will 'spool' the information that needs to be sent to the printer to your hard disk, rather than storing it in memory. The document can then be printed out when more memory becomes available later.

If all else fails, you could try turning on virtual memory in the Memory Control Panel. It will slow your Mac to treacle, but you should be able to print your files out. **MF**

If you send in a question for the MacFormat experts to solve, please fill in and include this form (or a copy of it). And please make sure that you include all the relevant details – version numbers of software and so on – so that we have the best chance of helping you. Send your form and question to: MacAnswers, MacFormat, 30 Monmouth Street, Bath BA1 2BW or fax it to us on 01225 446019.

Name .....

Address .....

.....

.....

.....

Your Mac
(For example, Performa 200, IIfx, PowerBook 145):

.....

System version
(see **About This Macintosh** screenshot above): .....

Amount of RAM
(see **About This Macintosh** screenshot above): .....

Are you using Virtual Memory? ..... **YES/NO**
(This is accessed from the Memory Control Panel under System 7)

Do you have 32-bit addressing turned on? ..... **YES/NO**
(This is accessed from the Memory Control Panel under System 7)

Details of any relevant hardware which could help us to answer your question:

.....

.....

Now, use this space to describe your problem or question. Please include as much relevant information as possible, and continue on a separate sheet if necessary.

.....

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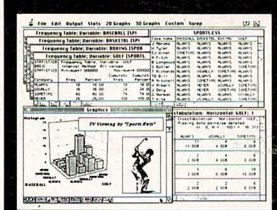

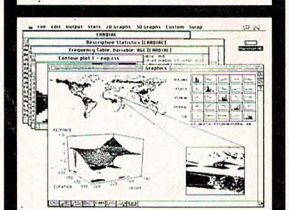

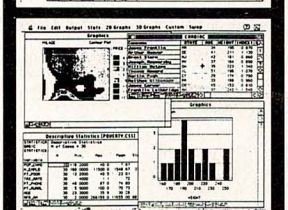

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Power 120

A few years ago it seemed impossible, but Mac clones are now reality. Can a copy be as good as the original? Lindsay Bruce finds out.

Alien invasion! The first of Power Computing's Mac compatibles may look distinctly un-Mac-like from the outside, but underneath that deceptive white casing it's 100% pure Macintosh.

Power Computing was set up last year by Apple and Olivetti, another large computer manufacturer. Though completely independent from Apple, Power Computing is closely linked with the company and has received much technical assistance in the design of its Mac compatibles. On the face of it, it would seem that Power Computing is ideally placed to become a major player in the Mac market. This issue, we take a look at the Power 120, one of the first Mac compatibles, and ask the most vital question of all: is it really a Mac?

The short answer is no. Although the machine runs the Mac Operating System and is 100% compatible with Apple machines, it's not a Mac – it's a Mac-compatible. Apple has slapped copyrights all over the Mac name and won't let anyone else use it. The Power 120 isn't even officially a 'Mac clone' – this euphemism is also frowned upon. But enough of the legal nonsense – what's the machine like?

The Power 120 is a faster 8100/110, in a different case. It's based around a PowerPC 601 processor running at 120MHz, with three NuBus slots, 8Mb of RAM and a 540Mb internal hard disk. The RAM can be expanded up to 200Mb, and three internal 5.25-inch drive bays are provided for additional storage – one of which holds a quad-speed CD-ROM drive as standard.

It comes with 1Mb of video RAM, enough to display thousands of colours on a standard 640 x 480 monitor, and can be expanded to 4Mb, enough to display millions on a 20-inch monitor. A 256K Level 2 cache card is also pre-installed – something lacking from the range of PowerMacs. You even get an extended keyboard, mouse, and mouse mat in the box.

Technically speaking, the Power 120 falls down because it uses old technology – the same 72-pin SIMM and NuBus slots found in Apple's previous series of PowerMacs, rather than the new DIMM and PCI slots. To be fair, the Power 120 does precede Apple's new range (it took us this long just to get hold of one), and to people who've invested in SIMMs and NuBus cards, this may be an advantage.

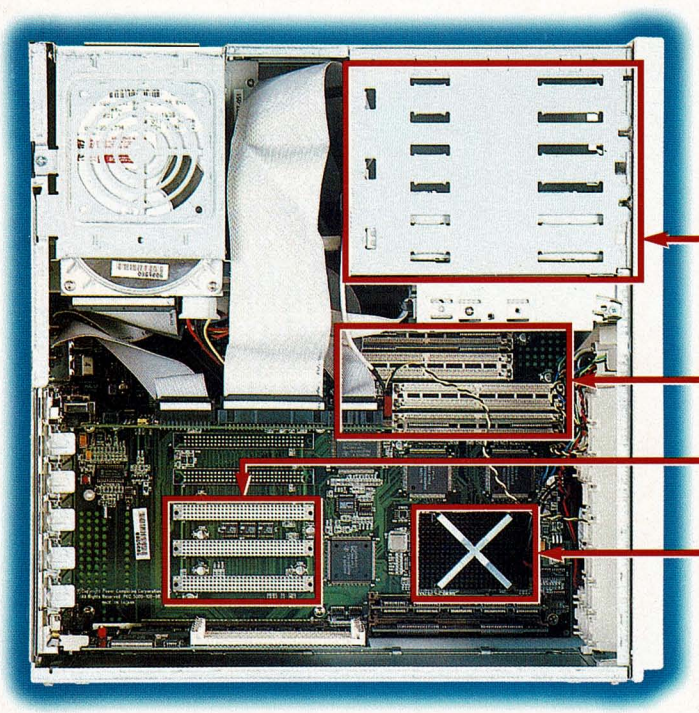
In testing

When powered up for the first time, our test machine crashed as soon as the Desktop appeared. Not encouraging. Having said this, the Power 120 ran – at speed – without complaint, and it ran fast – even starting up incredibly quickly. Shareware and non-PowerMac applications ran problem free. *Microsoft Word* ran without complaint, as did *ClarisWorks*, *Photoshop*, *Illustrator*, and *StrataVision 3d* (the cover of MACFORMAT 34 was rendered on the Power 120). *Norton Utilities* and *MacTools Pro* ran with no problem (and reported no problems), and *HyperCard* blazed along. In fact, all the major Mac applications ran like a dream. This is as much a Mac as an Apple Mac.

Supplied with the compatible is a CD-ROM packed with System software and a host of bundled software

OTHER MACS

Power Computing was the first company to produce Mac-compatibles for the UK market, but other companies including Bandai, Pioneer, Radius and UMAX (best known for its scanners) have also licensed the Mac operating system. This means that in the future you'll have more choice in who you can buy a Mac from, which means competition between manufacturers, which means cheaper Macs!



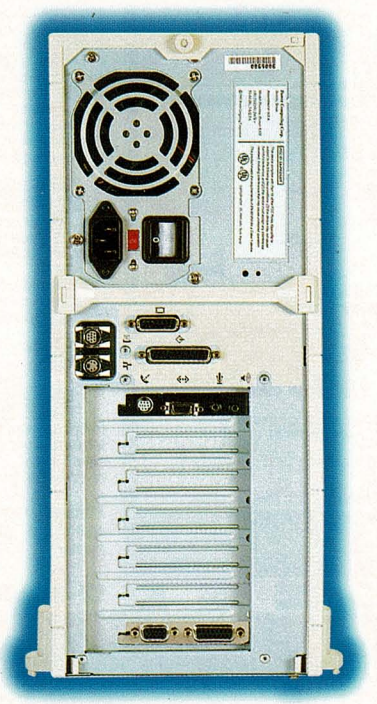
Getting the case off is easy. Once inside, all of the expansion and memory slots are easily accessible.

Drive bays (one quad-speed CD-ROM drive fitted as standard, two spare)

SIMM slots for RAM expansion

NuBus slots for graphics, accelerator and network cards

Processor (PowerPC 601)

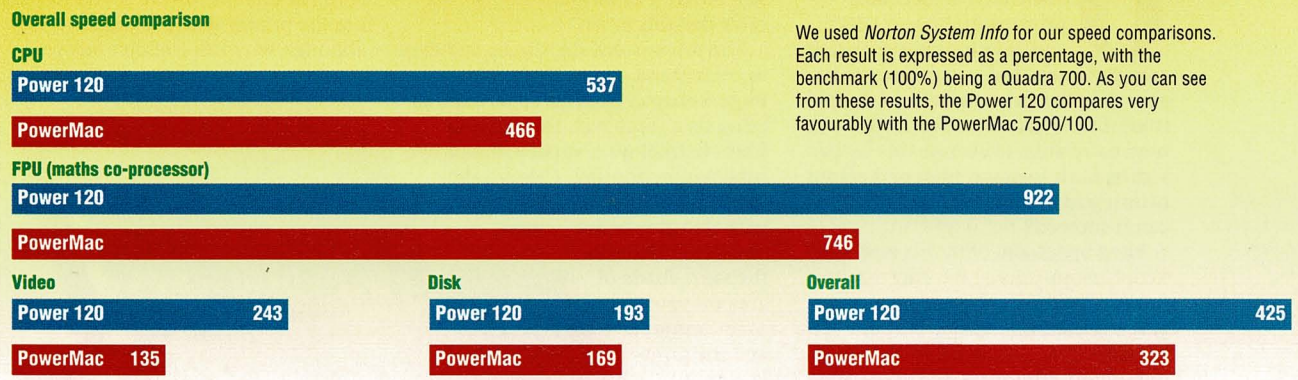


Like the front, at first glance the back of the Power 120 looks nothing like a Mac, but all the familiar ports are here.

HOW THE COMPATIBLE COMPARES

Although the Power 120 is technically very close to Apple's 8100/110, the latter has been discontinued, which means the Power 120's closest surviving Apple relative is the PowerMac 7500/100. Both use the PowerPC 601 processor at similar clock speeds, but otherwise the two are technically very different. The comparison in the table below should give you an idea of what you get for your money when you buy a Mac-compatible machine as opposed to a true Apple Macintosh.

Computer	Processor	Clock speed	Processor daughterboard	Expansion slots	RAM	Memory type	VRAM	AV capability	Street price
Power 120	PowerPC 601	120MHz	No	3 NuBus	8Mb exp to 200Mb	72-pin SIMM	1Mb exp to 4Mb	Optional	£1,762
PowerMac 7500/100	PowerPC 601	100MHz	Yes	3 PCI	8Mb exp to 512Mb	168-pin DIMM	2Mb exp to 4Mb	Records 16-bit stereo sound. 24-bit S-Video and composite video inputs.	£1,997



We used *Norton System Info* for our speed comparisons. Each result is expressed as a percentage, with the benchmark (100%) being a Quadra 700. As you can see from these results, the Power 120 compares very favourably with the PowerMac 7500/100.

titles including *Now Contact and Up-To-Date, Now Utilities,* and FWB's *CD-ROM Toolkit* and *Hard Disk Toolkit.* Also included is the popular *System 7.5 for Dummies* book, which tells you all you need to know about Macs if you're just making a start in the world of Macintosh computing.

Getting inside

The Power 120's tower unit is easy to get into and, unlike Apple's tower units, all of the expansion and memory slots are accessible. The tower is the same height as Apple's PowerMac 9500, and is reasonably well designed, although it looks far more like a PC than a Mac.

The back panel is obviously constructed to be modular in design so it can be configured to any specification you like. Fancy a bigger hard drive? More memory? An Ethernet card? An AV card? A graphics accelerator? No problem – you can have the computer configured for you before you buy it. In America you can have Power Computing build a Mac compatible from scratch to your specification, while in the UK a similar service is offered through Computer Warehouse (currently the sole UK distributors), who can put a clone together to any RAM and hard disk configuration you like. This kind of philosophy has been commonplace in the PC world, but it's unheard of in the Mac world. The downside of this otherwise great idea is that the back panel ends up looking as ugly as a road accident.

Oddly enough, the Power 120 has two power buttons: a hefty rocker switch on the back, and a dainty illuminated one on the front. As if this wasn't enough, you can even start the thing up from the power key on the keyboard. Is this plethora of options really necessary?

On the front of the case, next to the power button, are two small buttons: a reset button and an interrupt. This means you don't have to fiddle about, groping for the reset button on the back of the unit. Apple would do well to take note of this.

The most annoying thing about the Power 120's casing is the thoughtless positioning of the CD-ROM drive: right above the floppy disk drive. If the CD caddy happens to be in the out position, removing floppy disks becomes tricky, because you can't actually see them. You simply have to push the caddy back in, but it's a pain all the same, and if you keep your Mac under your desk, the 120's CD-ROM drive is at just the right height for the caddy to catch you smartly in the kneecap every time you eject a CD.

Another oddity is that the machine ships with System 7.5 preinstalled – not the System 7.5.1 update which is provided on the CD in the box. Odder still, the Mac OS logo you see on start-up is just a mock up – it's simply a 'StartupScreen' PICT in the System Folder. Why couldn't Power Computing ship its compatible machines with the latest version of the Mac Operating System preinstalled? Your guess is as good as ours.

The last word

The Power 120 is a very fast Mac compatible with a few niggling faults. Given the price difference between this and an equivalent Apple Mac, the Power 120 will find favour with those who need plenty of power but have tighter budget restrictions. The compatible has an impressive technical specification with the performance to match, and the bundled applications are amazing – far more useful than the software you get with most Macs.

Overall, however, a little more thought could have gone into the machine's design. When it crashes (and it does crash, like any Mac) it's nearly always on startup, with no apparent cause. A quick reset always solves the problem, but it's still a pain. It seems that a few faults, which could easily have been fixed before the Power 120's release, end up marring what is otherwise an incredible computer. Even with its 'outdated' technology, it's well worth considering. **MF**

POWER 120

Price: £1,762 (including 8Mb of RAM, 540Mb hard disk, 1Mb of VRAM). **Out:** now. **Contact:** Computer Warehouse on 0171 724 4104.

FEATURES 92%
Very fast, lots of bundled software, keyboard and mouse included.

EASE OF USE 72%
Crashes too often for comfort. Case needs a makeover, and an upgrade path like the new PCI Macs would be a plus.

DOCUMENTATION 91%
Detailed sections on upgrading and troubleshooting, as well as Mac manuals and *System 7.5 for Dummies* book.

VALUE FOR MONEY 89%
Considering its undeniably impressive speed, the Power 120 is a snip at this price.

MACFORMAT RATING 81%

MORE POWER

Power Computing's first clone is a landmark in computing, but the company has already announced the release of its second series of Mac-compatibles. The PowerWave series is based on the same DIMM/PCI technology as the current range of Apple Macs, and uses the same PowerPC 604 chip as the PowerMac 8500 and 9500. Power is also working on multi-processor Mac-compatibles that use no less than four PowerPC 604 chips.

NEC SuperScript 3000

Can NEC's new colour printer, offering a variety of printing methods, make colour printing any less costly? Lindsay Bruce goes in search of the Holy Grail.

One of the many problems associated with colour printing is the cost. High end colour printers cost an arm and a leg, and you can never be sure the final printout will look anything like what's on screen. NEC's new baby aims to change this by providing both low and high end colour printing in one desktop printer. But can it succeed?

The SuperScript 3000 is a non-PostScript colour printer, offering three printing methods: thermal wax, variable dot thermal transfer, and dye sublimation. This is unusual in its own right; most printers in this price range offer dye sublimation as an expensive add-on only. Dye sublimation can reproduce 16.7 million colours on paper; variable dot thermal transfer comes second, with around 262,000 colours; and thermal wax manages a mere 32,000 colours. The range of printing options is intended to make the machine an all-rounder – you can print your letters, invoices and memos on it, and turn out full-colour high-quality prints for presentations or for publication. In short, simple printers might have a 'draft' and a 'fine' setting; this one has 'draft', 'good', and 'bloody gorgeous' settings.

The SuperScript comes with 2Mb of RAM installed, and you can add a further 8Mb using the 72-pin SIMMs that most older Macs use (although not the newest PowerMacs), which you can pick up for about £230. This will speed up printing of very large colour files considerably, since the whole image can be transferred to the printer in one go instead of in small chunks.

The SuperScript does not, however, have a Mac serial port. To use it with your Mac you have to buy a separate connection kit, costing an extortionate £151.58, comprising a connection cable, driver software, and a thin manual. Surely a cable and a floppy disk can't cost this much?

The driver software is basic and easy to understand – you simply select **Page Setup...** from an application to bring up a setup box, then choose from thermal wax, variable dot or dye sublimation printing. Colour calibration is provided by a window with two grey boxes – simply match the boxes to the same shade of grey on your Mac's monitor, and the printer is calibrated. You can also separately control the amount of ink applied to the page, and the contrast of the printed image, which means you can get accurate printouts with any Mac application, rather than just those that have colour matching options (such as *Adobe Photoshop*). A special plug-in is supplied with the driver software if you want to use the printer with *Photoshop*, although why this couldn't just be

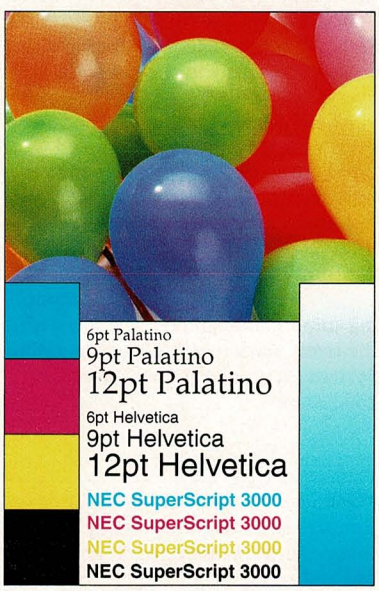
The SuperScript is an attractive looking beast, and the paper trays fold away, so they take up no room at all.

POSTSCRIPT

PostScript is Adobe's page description language. It's a set of commands that describe an image (be it a font or a picture) using a series of equations. For these to be any good, your printer has to be equipped with a PostScript interpreter – a bunch of computer chips that tell the printer what all the commands mean.

NEC CONSUMABLES

Ink ribbons	Cost	Life
Monochrome (black)	£30.55	360 sheets
Three-colour thermal wax	£41.13	107 sheets
Four-colour thermal wax	£42.30	80 sheets
Four-colour thermal wax A4 long	£48.18	75 sheets
Variable dot thermal	£81.08	107 sheets
Dye sublimation	£44.65	25 sheets
Paper		
Thermal wax	£29.38	500 A4 sheets
Dye sublimation	£14.04	25 A4 sheets
Transparencies	£38.78	100 A4 sheets



Our original test page. Compare this with the scanned printouts from the SuperScript 3000 in each different print mode, displayed on the right.

Thermal wax: fine for rough work and previews, but not breathtaking. The NEC took just over 13 minutes to print the test image in this mode.

WHICH PRINTING METHOD?

The SuperScript offers three ways of getting ink onto paper: thermal wax transfer, variable dot thermal transfer, and dye sublimation. **Thermal wax** is the basic method, and involves heating an area of thin film coated with a special wax (the ribbon) and transferring the wax onto the paper. Colour 'tones' are generated in the same way as a mono printer deals with greyscale – a series of small dots approximate the tone. **Variable dot** is similar, but can use different dot sizes to approximate colour tones, which makes the finished image much sharper and cleaner and can simulate up to around 262,000 colours. **Dye sublimation** is the star printing method, capable of producing 16.7 million colours on paper with little or no colour banding and none of the grainy, stippled effect you can see on thermal wax printouts. It works by heating the dye on the ribbon until it turns into gas (sublimates, in techno jargon), which then settles on the page in a fine mist. The result is an incredibly realistic print – sometimes called photorealistic. Not surprisingly, though, dye sublimation is an expensive method (see the 'The real cost' box), and it takes ages to print anything out.

Colour printing usually involves at least three colours: cyan, yellow and magenta. Extensive research into printing has proven that these colours produce the best overall results. However, a fourth colour, called a key (black), can also be used. In theory, if you mix cyan, yellow and magenta together, you get something approaching black – but what you really get is a dark brown. The 'key' is used to reproduce black or very dark areas of colour in a printed image.

Which ribbon you use in the SuperScript depends on what you want to print out. A monochrome ribbon is the best if you're printing text or line art (black and white graphics), and a three-colour ribbon is best for graphics only. For a mix of the two, a four-colour ribbon (including black) is your best bet as it produces blacker text.

THE REAL COST

Ink type	Cost per page
Monochrome	14.5p
Three-colour thermal	44.5p
Four-colour thermal	58.5p
Variable dot	81.5p
Dye sublimation	£2.34

built into the driver is a mystery.

As well as the three printing modes, you can choose between monochrome, three-colour, and four-colour printing. Monochrome is black (ideal for text), three-colour is cyan, yellow, and magenta (ideal for graphics), and four colour is cyan, yellow, magenta, and black (ideal for a mix of text and graphics). The three and four colour options are only available for the thermal wax and variable dot modes – dye sublimation is so good it doesn't need black ink. You need a separate ribbon for each type of printing – you can't use a four-colour ribbon for three-colour printing, for example – and unless you have stocks of each type of ribbon, this curtails your options somewhat. Each ribbon comes on a roll, which you mount into a carrier. This then sits neatly in the printer. Swapping the ribbons over is easy, quick, and clean – a single latch on one side of the printer opens it up, the ribbon carrier is right in front of you, and you just haul the carrier out, swap the rolls, and dump the carrier back in place. So easy Mr Bean could do it.

The printer only comes with starter sheets of paper for each ink type, and one short ink ribbon for each printing method. This will print about 10 pages and is not particularly generous of NEC. The hopper accommodates up to 50 sheets of coated paper for use in thermal wax and variable dot mode, 20 sheets of the rather thicker dye sublimation paper, or 10 transparencies, which can be used with either the thermal wax or variable dot modes. Weighing in at 10kg, the printer has a doorstop feel to it, but the case is well-designed and it doesn't take up a great deal of desk space.

How does it perform?

The SuperScript outputs pages at 300 dpi (dots per inch), but because it is non-PostScript, text looks jaggy when printed out. Pictures and line art print much better, but the printer has a problem with some subtle colour gradients, even in dye sublimation mode. Thermal wax or variable dot mode is fine for proofing colour graphics, while dye sub mode produces photorealistic prints – as good as you get from any printer in this price range, although very fine colour gradients tend to get lost.

The printing speed varies depending on which printing method you use. In monochrome it gallops through three pages per minute, while in colour dye sub mode this drops to more like one page every 15 to 20 minutes. The documentation supplied with the printer does help you to set it up, but fails miserably to explain all the jargon that it makes use of.

If you're planning to print mainly text, you should go for a good PostScript mono laser, which will produce better text results and cost half as much. If, however, you're looking for an all-round printer to produce rough colour proofs but which is also capable of the occasional high quality print, then the SuperScript is a sound bet – if on the expensive side. **MF**

Variable dot produces a more refined image than the thermal wax option, but takes a little longer to produce. This took nearly 18 minutes to print.

Dye sublimation. This is the photorealistic (16.7 million colours) printout, and it looks fabulous, but did take over 23 minutes to create.

SUPERSCRIPT 3000

Price: £763.95 (including connection kit)
Requires: LCII or better, 8Mb of RAM, System 7.1 or later.
Contact: NEC on 01345 300103.

FEATURES 85%
Lot of different printing options and good, uncomplicated driver software.

EASE OF USE 90%
Easy to set up, and simple to change the ink ribbons when necessary.

DOCUMENTATION 59%
Helps you set up the printer, but doesn't explain any jargon.

VALUE FOR MONEY 79%
An expensive printer for general usage unless you know you need the dye-sub option to produce quality colour images.

MACFORMAT RATING 88%

QUICKDRAW

QuickDraw is Apple's own graphics imaging system, built into the Mac's Operating System. All Mac applications use QuickDraw to display information on screen, and when you print (at least to a non-PostScript printer) it is QuickDraw that translates the data into a form the printer can understand.

Fuji FV-10

Fuji's new digital camera claims to be a scanner, video and stills camera all rolled into one, but can one camera really manage all this?

Digital cameras are becoming all the rage. While everybody else is trying to perfect their stills, however, Fuji has come up with something altogether more ambitious. The FV-10 is basically a digital video camera, with a 35mm slide holder and a pair of lights mounted on the front. The idea is that you can use it to record live video footage onto your Mac, make low resolution scans of 35mm slides, and scan photographs into an image cataloguing program.

The FV-10 is not strictly designed for use with a Mac – this is purely incidental. It was designed to plug into a television or video recorder in the home, enabling you to take video footage of your pets and archive your holiday snaps onto video tape. To this end, it has composite video and S-Video connections – both of which readily connect into the back of an AV (Audio-Visual) Mac. Unsurprisingly, perhaps, no Mac software is provided with the camera – but then, if you have an AV Mac, you'll already be in possession of all the software you need.

The FV-10 certainly doesn't lack features. It has autofocus, zoom, colour and brightness controls, can capture video, positive or negative prints and slides, and has eight different masks for framing your pictures. You can even mount it on a tripod.

Impressed?

It's supplied with two film carriers, one for 35mm slides and one for 35mm negatives. You also get an external power supply, composite and S-Video connection leads, and a reasonably understandable manual. The manual simply tells you what the features are and how to set it up; there's no advice or tips on how to get the best out of the camera – presumably because it's only as an afterthought that it's being marketed as a piece of Mac kit.

Although all these specs sound impressive, the FV-10 lacks the one thing that would make it any practical good as a digital camera: any sort of storage medium. It has no facility to store pictures or video footage itself; you have to connect it to your Mac or a VCR to do this. This makes it one of the most non-portable cameras in the world.

The camera itself has a maximum resolution of 400 x 350 pixels. This might be loads for bog-standard TV, but for a Mac it's pathetic – even Apple's modest QuickTake boasts 640 x 480. As a result, although you can have the image as large as you like on screen, there's no point in making it any bigger than 400 x 350 pixels because you won't get any more detail.

As a stills camera, the FV-10 isn't impressive. It has a problem with images that contain even moderate colour contrast – bright flowers against a dark background, for example. Images look washed out, and mucking about with the colour controls on the side of the camera doesn't make a blind bit of difference. You can, of course, correct this in an image editing program such as *Photoshop*, but the quality and resolution of the image are so poor that it's difficult to imagine a scenario where you would want to. Slides, prints, and negatives all suffer from the same problem – the camera just isn't sensitive enough to compensate for oversaturation in one part of the picture without affecting another.

As a video camera, it doesn't fare much better. There's little point in being able to capture video unless you can walk around with the camera, and without batteries or any form of media storage built in, this is virtually impossible. The quality of the video image is just about identical to the stills: passable but with washed out colours and poor colour balance. At least with an ordinary video camera you can record video to a tape within the camera itself, instead of having to connect it to a video recorder.

Nice toy, but...

Low res images are all this camera can manage, which means its only practical use is as a reference tool. Photographers could use it to view negatives when time or cost don't allow prints to be made. The only other obvious practical use is as a way to build up a database of low quality reference images.

But ultimately, what really counts against the FV-10 is its price. At a whopping £817, you could quite easily afford to buy a decent flatbed scanner, a conventional stills camera, and a video camera instead. At least with these, you'd get reasonable quality. Two of these are completely portable, too, which is more than can be said for the FV-10. If you're desperate to go digital, a QuickTake 150 or similar digital camera produces far better results at around half the price. **Lindsay Bruce**

The Fuji FV-10 photo-video imager is a strange looking beast, but once you've worked out what all the flaps and hinges are for, what can it do?

Get some free software

Although the Fuji FV-10 is not specifically a Mac product and it doesn't come with any Mac software, Computer Generation, who provided us with our test unit, is bundling the camera with *ImageAXS*, a solidly competent image cataloguing program. For more details, contact Computer Generation on 0171 937 8777.

FUJI FV-10

Price: £817. **Out:** now.
Requires: an AV Mac with AV video grabbing software.
Contact: Direktek on 0181 845 5969.

Features 52%
It can do lots of things, but it can't do any of them very well.

Ease of use 78%
Easy enough to use, but some of the features need more than the cursory explanation that is given in the manual.

Documentation 54%
Basic documentation gets the camera set up but doesn't tell you how to get the most out of it.

Value for money 32%
Over-priced. Under-specified. You'd be far better off buying a decent flatbed scanner and a conventional camera.

MACFORMAT RATING 43%

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Painter 4

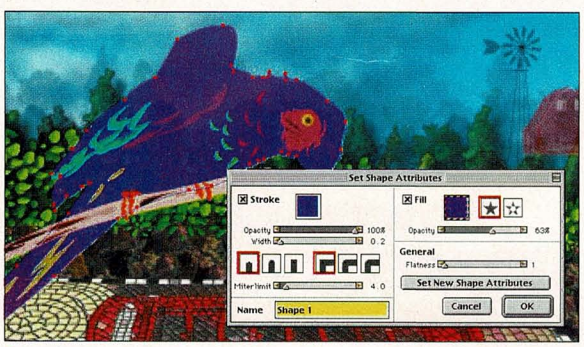
The perfect tool for artists on the Internet? The ideal combination of bitmap painting and vector drawing? Could *Painter 4* be both? Brian Larkman investigates.

You can find a save-disabled demo of *Painter* on this issue's Cover CD

Computers as a means of image-making have never appealed to traditional artists. A large part of their art is bound up in the 'process', and, as such, warm glass and cold plastic are a poor substitute for the tactile and intuitive pleasures of a sable brush, a textured surface, and soft, rich pigment.

A new generation of artists has embraced new media, however – film, video, performance, computers, and, most recently, the Internet. Meanwhile, fine art provides rich pickings for designers in their search for fresh ideas. This two way integration process looks likely to reach its highest expression by making use of the facilities that are available to users of the Internet.

It is apt therefore that Fractal Design has just released this version of *Painter*, which provides an exquisitely integrated and affordable environment for working simultaneously with so many media. Here you can apply the natural materials of both art and design (paint, chalk, textured paper, textiles, even mosaic) and the resolution-free tools of computer illustration and layout (spline curves, outline fonts and layered objects) in sophisticated ways to the newer media of photography, video, animation, and again, the Internet.



'Shapes' technology by Fractal makes *Painter* a good environment for both bitmapped painting and vector drawing. The Parrot object has been imported in *Illustrator 5.5* format. It is editable using bezier tools, but it can also be layered with bitmap Floaters, made semi-transparent, and use a Blending Mode.

Natural media

Since its original release, *Painter* has called the shots over the mainstream in graphic inventiveness, with the introduction of natural media tools, the Image Hose, synthetic lighting, multiple layers, recorded 'sessions', and many other stunning innovations. But to the graphic design mafia *Painter* has always seemed a little too arty, lacking the commercial production tools like advanced colour correction and CMYK support that it needs to compete with straightforward packages like *Photoshop*. Now however, with 'Shapes' technology revived from *ColorStudio*, plus collaborative Net painting, clickable Web page creation, and *Photoshop*, *Illustrator* and *FreeHand* interoperability included, could *Painter 4* transform the way we create graphic imagery?

The new feature that Fractal Design seems to be promoting foremost in the latest version of *Painter* is Mosaic – the ability to paint mosaic tiles into any image. This is not just a surface effect; each mosaic tile is an independent object that can be erased or reshaped to fit perfectly with the other tiles. The result is a remarkably realistic looking 'Roman Baths' effect from almost any image, although the process is not quite as easy and intuitive as some other *Painter* tools. The tutorial gives you a flavour of what can be done.

But of all its new abilities, *Painter's* compatibility with *Adobe Photoshop*, *Macromedia FreeHand* and *Adobe Illustrator* is probably the most important for commercial success. *Painter* will probably never compete with *Photoshop* in bread-and-butter image processing, nor *FreeHand* and *Illustrator* for vector graphics, but the ability to open and save *Photoshop 3* files with all of their layers, and artwork in *Illustrator 5* format, is vital for the easy interoperability most designers require.

An even more innovative feature, and one that might finally wean users away from the *Photoshop, FreeHand, Illustrator* triumvirate, is the 'Shapes' PostScript drawing layer. Using this, *Painter* can now import vector artwork and interleave it with bitmapped Floaters and other Shapes, applying true semi-transparency while retaining vector-based resolution independence. You can even use *Painter's* Composit-

Natural Media

Fractal Design effectively invented the classification of 'natural media' paint program. Unlike earlier bitmap paint programs, designed for low resolution, slow processors and little memory, *Painter* and *Dabbler* rely on the recent generations of powerful desktop machines to simulate realistic mark-making on screen – Marker Pens even get dirty as you use them. *Painter* takes the concept even further – each tool can be customised to generate every attribute a natural medium might possibly have.

1 **Make mosaic.** The most interesting – in fact the only – new painting medium for *Painter 4* is its Mosaic feature. It is possible for you to paint Mosaic tiles directly, using a freehand method, but if you want to work from a scanned image you must produce a 'clone' first. You then overlay the clone with Tracing Paper (**Canvas/TracingPaper**), and launch the Make Mosaic function (**Canvas/MakeMosaic**).

2 **Outline the main features.** Using Mosaic takes over *Painter 4* completely, disabling tools and covering the canvas with 'grout'. Controls are provided here for size, placement, removal and colouring of mosaic tiles. Check the **Use Tracing Paper** box in the **Make Mosaic** palette to see the underlying picture, and **Use Clone Color** in the **Colors** palette to use the picture as a colour source. Outline the major features of your image to define them.

3 **Fill with diagonal rows.** Fill the remaining areas of your image with tiles, taking care to use contrasting directions for the lines of tiles so that original outlines stand out. Here diagonal lines have been used within the phone box, and curves and spirals outside. A smaller tile size was used for the outlines, providing better definition. When you've placed all the tiles, select **Render Tiles into Mask** from the **Make Mosaic Palette** menu ready for adding texture later.

The main *Painter* interface can get full if you allow it to, so some discipline is required. Version 4 has improved most palettes by adding menus, which group related functions together, and separate **Nozzle** and **Pattern** palettes.

The Romano Telecom mosaic has been placed in-situ at an archeological dig near Bath. The vegetation, earth and clouds were all added using the Image Hose – not a new feature in version 4 of *Painter*, but now offering a huge range of Nozzles.

ing Methods – Difference, Hue, Soft-Light and so on – on transparent areas (equivalent to *Photoshop's* Modes).

The power of the vector tools now available means that you can create complex artwork using *Painter*, but the antialiasing it uses slows screen redraw significantly. As a result, you're probably better off creating artwork in a dedicated illustration program, then importing it into *Painter* for fine tuning and adding natural media effects.

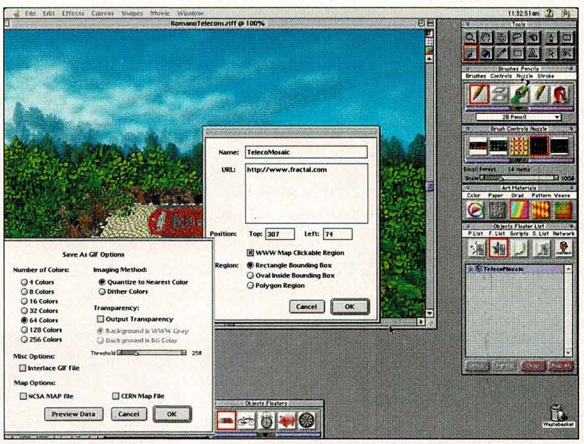
Surfing the net

The other major new set of features is *Painter's* Internet tools, Net painting and Web authoring functions. Net painting supports real-time collaboration, meaning that you can share documents across a network or via a modem – made possible by *Painter's* unique 'Scripting' feature. Every action you take while using the program is recorded in a macro-like script, which it is possible for you to save, edit and play back at any time. It is these scripts that are transmitted, rather than the bitmapped data itself, enabling very fast updates of a shared image over normal modem links.

Net painting is being promoted as a collaborative venture. Because the idea of sharing data on the Net is such a fundamental one, a whole series of long-term projects will certainly develop. One practical use is for brainstorming design ideas, enabling customer and client to interact despite being geographically separated. Another potential use is for distance teaching, whereby the tutor can correct mistakes and demonstrate techniques direct to your home machine – though this is not such a popular idea with hard-pressed, demoralised art and design lecturers...

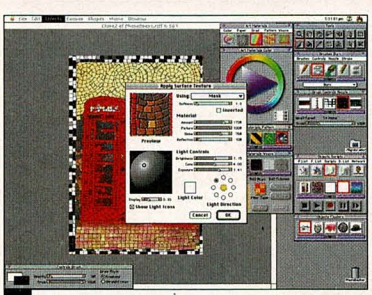
Once you have created your image – collaborative or not – an increasingly common way to publish it is on the World Wide Web (WWW). *Painter* provides a number of features to aid you in developing images ready for publishing. You can create clickable areas or Image Maps for hyperlinking, and save with serious compression in JPEG format or with transparency in Interlaced GIF format.

As the public consumers of graphic information become better educated visually, the refinement of the material presented to them has to develop ahead of their maturing 'taste wave'. The race is on to find the defining program that ties together the various strands of the online revolution. *Painter 4* may turn out to be that program. It's most certainly a large signpost on the way. **MF**



Painter provides a number of features to aid you in developing images ready for publishing on the Web. Clickable areas or Image Maps for hyperlinking can be defined as shown here. Saving in GIF format brings up a dialogue box – shown as an inset here – with control over a wide range of parameters.

4 **Add colour variability.** The **Mosaic** tool uses an even range of colours based on the original image, but real mosaics would normally create an uneven range. You can simulate this by increasing the **Colour Variability** slider on the **Colour** palette before placing the tiles, or using the **Change Tile Colour** tool on the **Make Mosaic** palette with **Vary** mode. You can add variability within each tile at a later stage by using **Effect/ Dye Concentration**.



5 **Create 3D texture.** *Painter* offers you the almost unique ability to add depth and texture to flat paintings using its **Surface Texture** feature. Click **Done** to exit Mosaic mode, and select **Effects/Surface Control/ Apply Surface Texture** from the **Main** menu. Set the **Using** menu to **Mask** (using the mask you saved earlier) and adjust lighting and softness. The result is astonishingly like a real mosaic.

FRACTAL PAINTER 4

Price: £468.83. **Out:** now.
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Contact: Computers Unlimited on 0181 200 8282.

FEATURES 95%
Now with Mosaic. What natural medium is left to add – tattooing?

EASE OF USE 80%
Easy to get started – but all those tools and palettes get confusing.

DOCUMENTATION 85%
Excellent manual and tutorials, useful Palette Picker and good on-line help.

VALUE FOR MONEY 90%
A lot of money – but then, you get a lot of features for your cash.

MACFORMAT RATING 91%

VECTOR AND BITMAP

There are two basic kinds of graphics: vector and bitmap. A bitmap is just a 'map' of each pixel used to compose the image. PICT and TIFF are examples of bitmap file formats. A vector graphic, on the other hand, describes the picture using a series of mathematical points and lines – vectors in other words. Adobe's PostScript is the most common vector based format.

Dabbler 2

MACFORMAT Classic

Natural media painting and animation is made easy with excellent on-line tutorials and loads of clip art. Go back to art school with this new, intuative software.

So, you find the complexity of *Painter 4* just too overwhelming. Maybe you can't spare the time or money to try such a big program, but you want to create natural looking illustrations. Then try Fractal Design's other natural media painting program: *Dabbler.*

Like *Painter,* it offers all the tools you could ever need – chalk, wax crayons, airbrush, oil paint, marker pens and water smudging – plus a huge range of textured papers and stencils, all designed to be used with a pressure sensitive tablet. But the original version had these, so what's new in *Dabbler 2?*

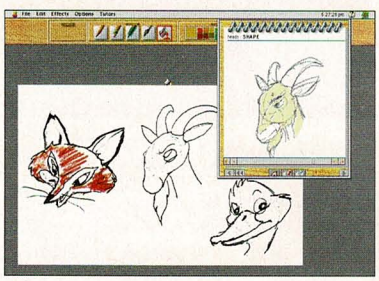
Although *Dabbler* offered all the tools you might need, its interface needed a little tweaking to get it just right. Version 2 is not perfect – some people will hate the quirky 'drawer front' Tool palettes no matter what – but on balance it's easier to use. Moving the Sketchbook, Sound, and Sessions controls out of the Tools drawer is a great improvement, and the extra space in the Brush Behaviour Drawer is sensible. Placing buttons on the drawer bar for flipping backward and forward through pages, and for activating cloning and tracing paper, is also very convenient.

Back to art school

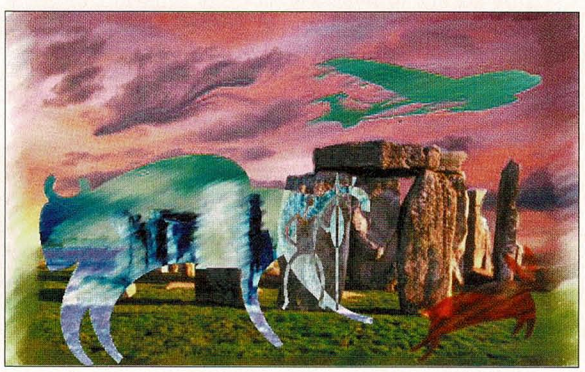
While the original *Dabbler* came with tutorials, those included in *Dabbler 2* are simpler. At first the idea of tutorials seems a bit of a gimmick – especially to art-trained users – but after some exercise you can see just how valuable these are to novice users, or, indeed, to anyone wanting to brush up on their drawing or cartooning skills. The whole teaching process is animated, and it's especially useful to be able to watch the various images take shape before your eyes. The way that the 'tutor' has used the various tools can be played mark-by-mark, analysed and copied exactly – by far the best way to learn drawing technique. It would have been nice to see an updated version of the original Walter Foster tutorials included on the CD for more advanced 'dabblers', though, and more than two sessions would certainly have been an improvement.

The addition of the wonderfully simple 'page-flipping' animation to version 2 is brilliant. There are no fancy tricks – just a simple onion-skin effect, enabling you to see the previously drawn frames or cells of your animation faintly through the drawing paper. This is beneficial as it allows you to progress characters incrementally. It's a pity no way could have been found to load small QuickTime movies, though – drawing over a ready-made movie can be great fun, and the chance to trace real movement would be educational.

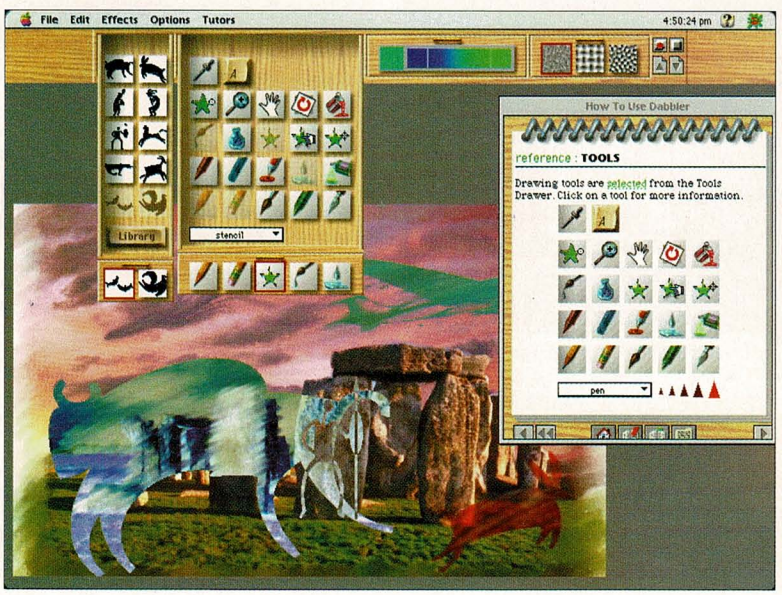
The quantity and quality of font-based clip art, paper textures, stencils and stock photographs provided on the CD-ROM mean that even the most inexperienced user will have no problem getting started easily. You have no excuse – get dabbling. **Brian Larkman**



Dabbler uses separate floating windows for tutorials. They are presented in the form of text, graphics and animations, so that you can watch the various images take shape before your eyes. They can be played mark-by-mark, analysed, and copied exactly – this is by far the best way to learn drawing technique.



The background image of Stonehenge here is actually a composite of a sunset sky with the stones pasted in front, created in *Dabbler 2.* The software has no capacity for feathering or antialiasing of selection edges but a little work with the Water tool hides any imperfections. The other objects in the picture are stencils, taken from the huge range available on *Dabbler 2's* CD-ROM.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4:50:24 pm
How To Use Dabbler
reference : TOOLS
Drawing tools are selected from the Tools Drawer. Click on a tool for more information.
Library
stencil
pen

The drop-down drawers interface is a matter of taste, but it is certainly simple to use. It now has a smaller brush drawer and a larger brush behaviour drawer. Buttons for flipping backward and forward through pages, and for activating cloning and tracing paper, have been moved to the drawer bar. Here you can see a large number of stencils in the Behaviour drawer, and the 'How to Use Dabbler' tutorial window.

Fractal Dabbler 2

Price: £58.69. **Out:** now.
Requires: Quadra or better, 8Mb of RAM, System 7 or later, 256-colour monitor, 10Mb of free hard disk space, CD-ROM drive.
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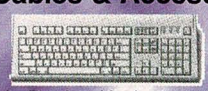

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ColorDrive

Colour printing can be tricky and unpredictable. What your monitor displays isn't always what your printer is capable of printing. Pantone could change all that...

WHICH PLATFORM?

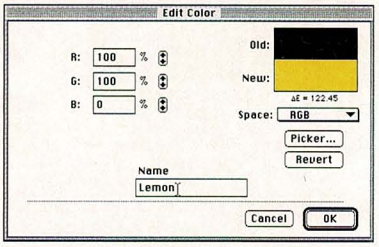
Now that the PC is climbing on board the DTP bandwagon, more and more graphics professionals are using these clunky old relics to lay out pages. *ColorDrive* enables you to swap colours between the Mac and the PC.

Colour reproduction is a real problem for publishing professionals. Most printed colours are created on the CMYK colour model – the full-colour image is built up from various combinations of four printing plates, cyan, magenta, yellow and black ('key'). Sometimes extra inks are added for special colours too.

The trouble is, monitors use not CMYK but RGB colour. Not only are the colours assembled from different components (red, green and blue light), but they are much more vivid, because the monitor is the light source whereas paper only reflects the light that falls on to it. Choosing colours based on their appearance on your monitor is not a reliable guide to how they will reproduce in print, which is why graphics professionals have to use swatch cards of calibrated colours and become experts in CMYK percentages.

DTP software publishers offer individual answers. Both *QuarkXPress* and *PageMaker* have built-in colour-correction systems, which attempt to match what you see on the screen with what you will get in print. However, both of these systems are application specific – they're not much help if you use several different applications and want to use the same calibrated colours in each. *ColorDrive* is different in that it uses the Mac's own colour management system – ColorSync – to help you create palettes of calibrated colours that can be imported into many leading DTP and graphics applications. What's more, it uses device profiles to match your monitor not just to high-end imagesetters, but most brands of desktop colour printer. This is extremely useful if you're a design professional who frequently needs to output accurate colour proofs for a clients to approve, before a job can be cleared for imagesetting and finally for publication.

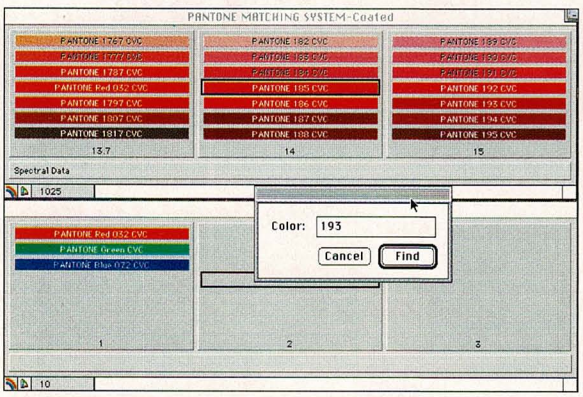
You carry out all your colour management activities using libraries – grid-based documents onto which you can drag colours from other libraries, and where you can edit and calibrate them. There are three types of library: the built-in Pantone colour library, printer-specific visually calibrated libraries, and custom colour libraries, where you can set up CMYK colours and convert to and from other colour models, including RGB.



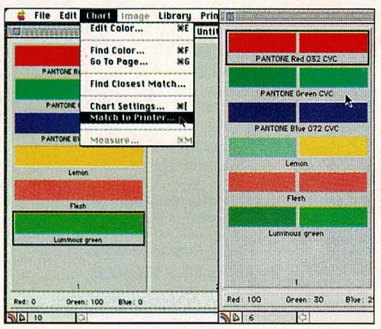
Apart from standard Pantone colours, you can create custom colours using a range of colour models – and convert colours between them.

ColorDrive also offers other useful features, including an EPS batch file converter for automatically correcting EPS colours. It can also import PICTs and TIFFs for colour correction, and then export them again.

The software's big selling point is that it gives you portable colour libraries that you can use with many different applications. Since designers routinely use three different types of application – *QuarkXPress* or *PageMaker* for DTP, *Photoshop* for image manipulation, and *FreeHand* or *Illustrator* for drawing and image origination – *ColorDrive* is the best way of ensuring consistent colour matching across all of your applications. **ROD LAWTON**



Pantone's *ColorDrive* provides a Pantone colour library. Finding specific colours or pages is easy, then you simply drag them onto your own libraries.



Once you've set up your device profiles you can match the colours you've created to your printer, so that you get a side-by-side comparison of what you'll see on the monitor and how this will be printed out in the finished product.

COLOUR MATCHING METHODS

You need colour matching when colours must be translated from a device with a larger gamut (range of colours) to one with a smaller gamut – from a monitor to a printer, for example. Apple's ColorSync, the system used by *ColorDrive*, offers three matching systems:

Perceptual match reduces (scales down) the gamut of an image to fit the output device. The colours retain their proportional positions to each other, although none are the same as in the original (they may nevertheless appear the same to the eye). This is most effective for photographs and other scanned material.

Colorimetric match simply alters those colours that fall outside the lower gamut of the output device – many colours remain unchanged. This may be important when matching solid Pantone colours, for example. The disadvantage is that remapped colours may become identical to unaltered ones, and will certainly not look like the original. This method gives best results when used to handle spot colours.

Saturation match maintains the saturation of colours at the expense of contrast. It's useful for bar charts, or other artificial graphic images that must be bright and colourful.

COLORDRIVE 1.01

Price: £140.94. **Out:** now.
Requires: LC or better, 4Mb of RAM, System 7 or later (with QuickTime), 256-colour display.
Contact: MacWarehouse on 0800 181332.

FEATURES 79%
Excellent for setting up and calibrating colours, but applications have to import and handle the colours their own way – there's no common Colours palette, for example.

EASE OF USE 84%
Colours are easy to set up, and straightforward to move and calibrate.

DOCUMENTATION 90%
Explains the features and functions very clearly and also provides background information on colour management and colour models.

VALUE FOR MONEY 82%
For a high-end DTP tool such as this, £140 is a fair price.

MACFORMAT RATING 84%

Win a Pantone Guide every year for life

It's an industry-standard colour matching system and it currently costs £70, but you could win a fresh copy of this Guide every year for life, courtesy of Pantone.

Colours on-screen are 'additive' – maximum intensity of all colours gives radiant white. Colours on paper are 'subtractive' – mix 100% of everything and you get muddy brown. If you're involved in graphics or DTP on your Mac, you know how important accurate colour matching can be. The colours you're working with might look just right on screen, but then turn out completely wrong on paper – or even completely unprintable on your imagesetter or printer.

Pantone, the established leader in colour technology for the past 30 years, is committed to helping printers and designers achieve more precise colour communication. Since 1995 it has embarked on a 'freshness campaign' to remind users when it is time to update their colour formula guides.

Normal wear and tear, exposure to light, and oil deposits from finger contact can cause fading and discolouration of inks and paper, so using old, worn-out Pantone Colour Formula Guides can result in costly colour mistakes and reruns. The solution? Update your guides regularly to make sure everyone is referring to the same standards. But although many printers and designers are aware that they should update their guides every year, research shows that they keep them for an average of six years.

Here's a way to make sure that your colour guides are always fresh and your colour specs always pristine. To mark the new year, Pantone is offering one lucky MACFORMAT reader a Pantone Formula Guide free every year for life. Its current price is around £70, so if you live another 30 years, say, that could be worth over £2,000.

All you have to do is answer the simple questions below and send us your entry on a postcard or the back of a sealed envelope. The closing date is Friday 22 March 1996.

Not only can you add some colour to your life with a Pantone Colour Formula Guide, but you can even be confident you know *which* colour it is.

The Rules

Employees of Pantone, Future Publishing Ltd or associated companies, and their families, are not eligible to enter. Multiple entries are not allowed, unless printed in at least five colours. The editor's decision is final, no correspondence will be entered into, and there is no cash alternative. Please state if you don't want your name added to a mailing list. MF

THE QUESTIONS

1. Which Pantone Guide shows solid Pantone colours with the nearest CMYK simulation?
2. How many colours are in the solid Pantone Color Formula Guide (to the nearest 500)?
   (a) 500
   (b) 1,000
   (c) 1,500
3. Which Pantone software product greatly improves output of Pantone colours on desktop colour printers?
4. Name the ultra high fidelity six-colour process printing system developed by Pantone.

Too tough? Well, if you fancy this prize, you need to know your onions from your Rubine red or Reflex blue. Once you've worked out the correct answers, send your entry on a postcard or sealed envelope to:
'Pantone Color Compo',
MACFORMAT, 30 Monmouth Street,
Bath BA1 2BW.

PageMill

MACFORMAT Classic

Using the World Wide Web is a lot easier than creating for it. Richard Hill tries out a new program that promises to take the drudgery out of Web publishing.

FIND OUT MORE

If you'd like to know more about Web publishing and how to create your own pages, check out the cover feature in MACFORMAT 30. See page 115 for further details on how to order your copy.

Virtually every page you see while visiting the Web is written with HyperText Markup Language, a language used especially so that Macs and many other types of computer can display the pages. Because it is designed to take into account the many systems used by computers and the limited speed of transmitting along telephone wires, HTML feels anachronistic if you're used to the Mac. It's a throwback to the Golden Age of computing, with awkward Heath Robinson contraptions contrasting sharply with the point-and-click sheen of today.

Still, it's all you've got if you want to create Web pages for people around the world to enjoy, until the new wave of systems like *Java* and *Shockwave* (see MACFORMAT 33's cover feature on the Mac in 1996) become more popular. You could just sit at your Mac and type out the commands as you go: hundreds of Web designers get away with doing just that, keeping all the codes in memory.

HTML's roots lie in the community of Netsurfers, who have been using the Net for many years, and have learned to roll up their sleeves to persuade their computers to communicate with each other. Perhaps it's because of this that HTML editing software has remained resolutely old-fashioned. Few programs make much use of the graphical powers of the Mac, so you won't find anything with the sophistication of a typical word processor or desktop publisher. Until now, that is.

Free your mind

PageMill enables you to create pages ready to put on your server for people to view through the World Wide Web. It offers ideas and features that you take for granted when you're using your favourite software, but which have been maddeningly absent from other HTML editors. Its biggest innovation is to do away with the idea of keeping the browser separate from your editing program; here the two are one. *PageMill* isn't a true Web browser in the sense that *Netscape* or *Mosaic* are: it can't display pages direct from other locations on the Web, but it can display and link between the pages that you've designed just like one. Click on the button in the corner, and the picture of the World (of Web fame) becomes a pen and paper. You're ready to create.

This means you don't have to make a leap of imagination while you're creating your pages to work out what they're going to look like once you've loaded them into a browser. It's all there before your eyes.

The manual that comes with the program encourages you to sit down with a sketch pad before you start a *PageMill* session, defining the layout of your pages and noting which links with which. You also get a tutorial that starts you placing images onto your page, setting up links and creating fill-in forms. These common features are all controlled using a single strip of icons at the top of your document.

Creating basic pages using *PageMill* is as easy as A-B-C. If you want to get

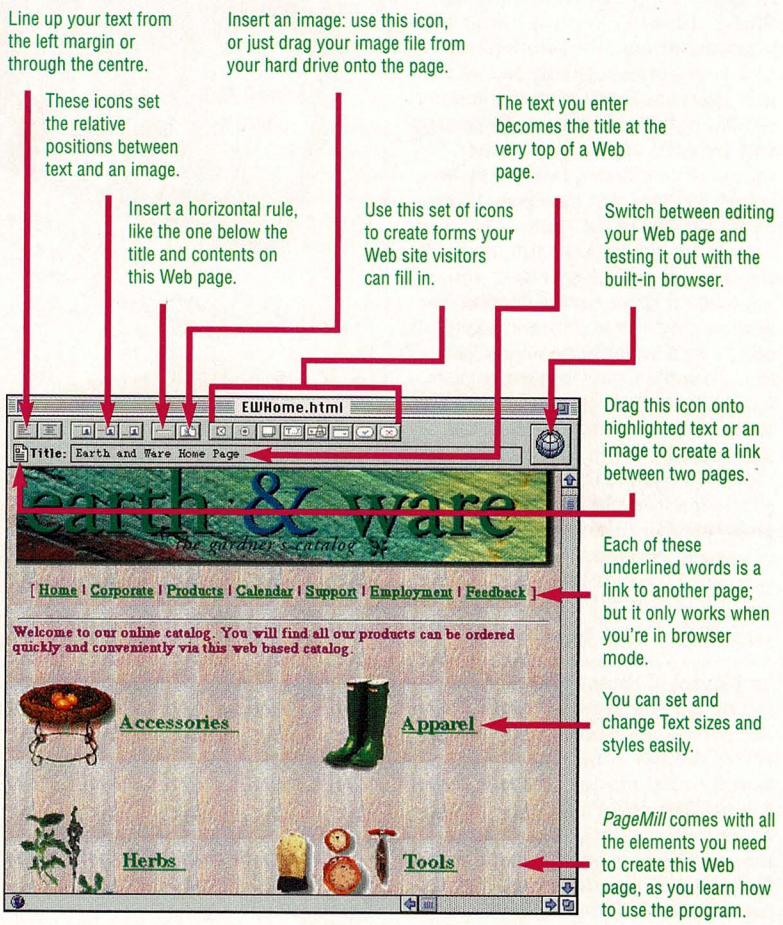
BEHIND THE WEB

The pages you read when you visit the World Wide Web are stored on computers across the world, which you'll usually refer to as **servers**. It is possible for you to set up your own server, but it's more likely you'll have to get your pages placed on a server belonging to a company. Many service providers (the firms that rent connections to the Internet) also offer space on a Web server, either for free or for a reasonable fee. Contact your own service provider for details.

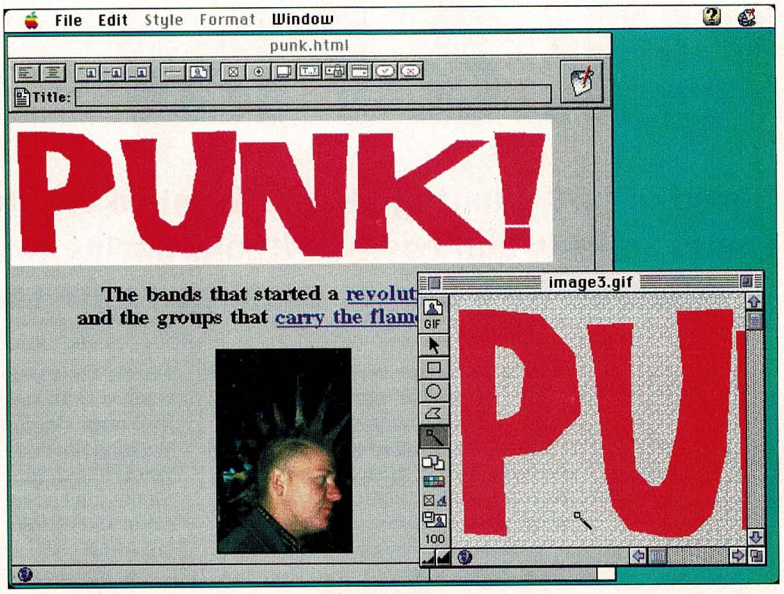
Web pages are written in HyperText Markup Language, which was devised specially for the task. It consists of basic codes that represent different commands. For example, <B> is an instruction to make text bold, while </B> reverses that instruction. Programs like *PageMill* are **HTML editors**, which you use to create the Web pages by entering these codes. Once they're made, you can get them onto a server.

Anyone with a good enough computer and Internet access can then use a program called a **browser** to view the pages: it converts the HTML codes into the text and graphics you see on your Mac's screen. The most popular browser is *Netscape Navigator*. The latest addition to the choice for your Mac is Microsoft's *Internet Explorer* (see News this issue).

If you believe the Internet is going to be as widely accepted as newspapers and magazines, one or two programs are likely to become as essential to Net publishing as *QuarkXPress* and *PageMaker* have been to print. The speed with which Adobe bought up the small firm behind the new program *PageMill* suggests it believes this could be one of them. The program joins the ranks of software you can use to create pages for the Internet's World Wide Web, but takes a fresh approach.


Line up your text from the left margin or through the centre.
Insert an image: use this icon, or just drag your image file from your hard drive onto the page.
These icons set the relative positions between text and an image.
The text you enter becomes the title at the very top of a Web page.
Insert a horizontal rule, like the one below the title and contents on this Web page.
Use this set of icons to create forms your Web site visitors can fill in.
Switch between editing your Web page and testing it out with the built-in browser.
Drag this icon onto highlighted text or an image to create a link between two pages.
Each of these underlined words is a link to another page; but it only works when you're in browser mode.
You can set and change Text sizes and styles easily.
PageMill comes with all the elements you need to create this Web page, as you learn how to use the program.
EWHome.html
Title: Earth and Ware Home Page
Earth & Ware
The gardner's catalog
[Home | Corporate | Products | Calendar | Support | Employment | Feedback]
Welcome to our online catalog. You will find all our products can be ordered quickly and conveniently via this web based catalog.
Accessories
Apparel
Herbs
Tools

Set text sizes and styles or even change a set of text into an organised list using the handy Attributes Inspector.



The image editor enables you to give your images a transparent background, and they're made Web-ready automatically.

some text on the page, place your cursor wherever you want and just type it in. You can then create different styles and type sizes (within the limits of HTML) with menu selections. You can also call up the Attributes Inspector, an unwieldy name for what's essentially a style sheet – like the ones you see in *QuarkXPress* or *ClarisWorks 4*.

You'll also want to put in a few pictures. *PageMill* uses the Mac's drag-and-drop facility to make working with images wonderfully easy. Decide which image you want to use, grab hold of it from wherever you're storing it on your hard drive, and drag it onto your Web page. Move it to its final position. Done.

What's particularly nice about these few steps is that the program has taken care of converting your picture file into a GIF – the only file format you can count on other people's browsers being able to show. If you want it somewhere else on the page, grab hold and move it. If you want to change its size, there's a frame around the image you can use to adjust that. You can use the Attributes Inspector to adjust its proportions, or to make the image work in different ways – changing it into a button that links to another page, for example. It's with setting and changing links that *PageMill* really starts showing off. Each document you make has an icon representing its file name and location at the top. Take a look at the 'Making links in *PageMill*' box at the bottom of the page to see how blissfully easy it is to use this to link two pages together.

The verdict

If you've become a proficient Web designer, you will find *PageMill* has its limits. You can't align text or images to the right of the page, for example. And if you take a look at the HTML code it creates, you'll find some little-seen commands that you could do without. If you use another HTML editor to add in codes that *PageMill* can't provide, these obscure commands are a pain.

PageMill may not be able to understand some HTML commands, but it can use some of the optional commands that Netscape has created, which you can use only with its own *Navigator* browser. It's a slightly eccentric way of doing things that can occasionally give the impression that *PageMill* is merely a work in progress with the promise of an even better program in the future.

But the program is so distinctive compared to a typical HTML editor that it enables you to look at your work in a completely different way. The most telling thing that can be said about using *PageMill* is that you can forget about codes and concentrate on designing pages. And from its early sales, it already seems to be encouraging people who had shied away from Web designing to get involved. **MF**

PAGEMILL

Price: around £120. **Out:** now.
Requires: LC or better, 3Mb of free RAM, System 7 or later.
Contact: Adobe on 0181 606 4000.

FEATURES — 80%
It can't use every HTML command that's available at the moment...

EASE OF USE — 95%
...but using what's there is too straightforward for words.

DOCUMENTATION — 76%
Friendly and slim manual (but without an index).

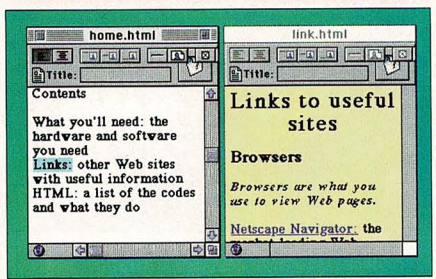
VALUE FOR MONEY — 91%
Low low price makes it a good impulse buy.

MACFORMAT RATING — 90%

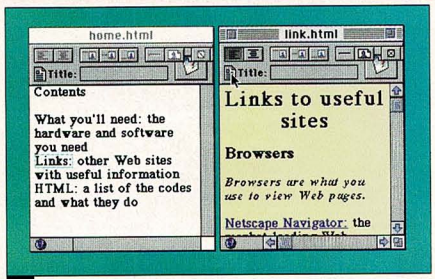
BE CAREFUL OUT THERE

If you want to use an image someone else made, you need to get permission from the copyright holder before you put it on a Web page. But some companies sell collections of pictures that you're free to use once you've bought them, like the *Corel Professional Photos* range shown on these pages.

MAKING LINKS IN PAGEMILL


home.html
link.html
Title:
Contents
What you'll need: the hardware and software you need
Links: other Web sites with useful information
HTML: a list of the codes and what they do
Links to useful sites
Browsers
Browsers are what you use to view Web pages.
Netscape Navigator: the

1 Open up the two pages you want to link together, and highlight the text (in the left window) that is going to form the actual connection.


home.html
link.html
Title:
Contents
What you'll need: the hardware and software you need
Links: other Web sites with useful information
HTML: a list of the codes and what they do
Links to useful sites
Browsers
Browsers are what you use to view Web pages.
Netscape Navigator: the

2 Each *PageMill* document has an icon that represents the name and location of the page. Grab hold of it and drag it onto your highlighted text.

home.html
link.html
Title:
Contents
What you'll need: the hardware and software you need
Links: other Web sites with useful information
HTML: a list of the codes and what they do
Links to useful sites
Browsers
Browsers are what you use to view Web pages.
Netscape Navigator: the

3 It's as simple as that: the highlighted text has now become a link. Now you can switch into browsing mode to make sure that your connection works.

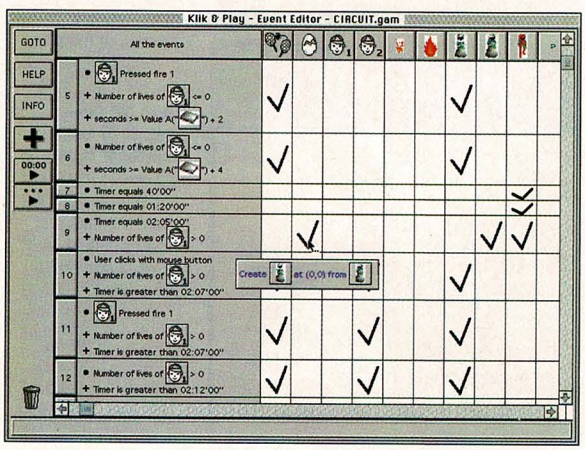
Klik & Play

Bored of just blasting aliens? Want to create your own games quickly and easily, without having to learn how to program? Nick Harper might just have the answer.

Try it for yourself – there's a demo of *Klik & Play* on the Cover CD

The recipe is simple. Take the essential ingredients of any popular computer game – graphics, sound, aliens, platforms. Bung them into a pot on gas mark Make a Quick Buck, simmer for 20 minutes, and serve up a commercial software release.

Klik & Play is all you need to create Mac games and presentations, without having to know a thing about programming. Creating games is not just breathtakingly easy, it's also fun. Or so boasts the manual. The reality, of course, is slightly different from this clever marketing vision of a DIY games factory – or rather, cottage industry – and yet the basics are there. *Klik & Play* is billed as an easy games creating utility. Forget slogging through your *Apple Technical Library*. Forget learning programming routines to draw characters on the screen. Forget how to type, even. *Klik & Play* does it all for you. As far as this goes, it's true enough.



So this is simple game design, is it? The ugly Event Editor enables you to control the intricacies of your game. Note the strange design of icons, the missing size box, and worse still, the oversized, odd-shaped scroll bars, which conflict with any rule Apple ever laid down about software design.

The development process mimics that of a movie or cartoon. Each significant section of a game – opening titles, main game, bonus round, whatever – is storyboarded into thumbnail replicas of the finished screen. You concentrate on each part of the game, gluing the components together once everything is complete.

Select a storyboard element and you can jump from it to the Level Editor, where the 'magic' occurs. A list of icons is displayed on the left, each representing a library of sprites (game characters) or backgrounds. These graphics are superbly drawn, covering a wide variety of subjects, with lifelike animation given to most characters.

Unfortunately, this variety is not particularly advantageous, since it is difficult to find graphics that can be effectively used in the single-screen gaming environment *Klik & Play* demands. One backdrop is a wonderfully lifelike pirate's galleon – but searching through the library for a swashbuckling cast to fill this ship is a depressing experience. After clicking on several different icons, you end up falling back on the 'space invaders take control of the Marie Celeste' scenario again. You could draw the characters yourself, using the in-built sprite editor – but that pretty much defeats the purpose.

Another graphical irritation is the enormous size of some of the sprites – a 200 pixel high alien looks terrific, but there's little you can do with it in a single-screen game, apart from immediately squashing Player One beneath the giant alien's enormous foot.

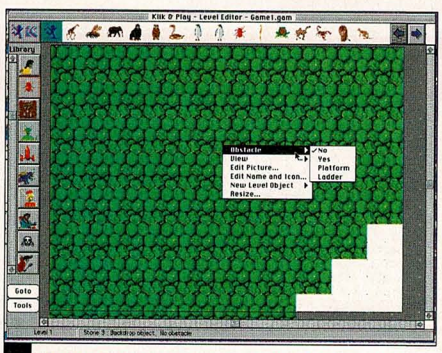
Just click and play?

Once you've selected your game characters, placing them on the screen is simple – click on the graphic and plonk it on the game area. However, to make the characters *do* anything requires more clicks and less play.

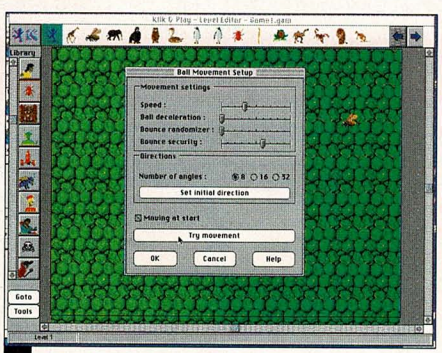
Klik & Play offers six types of movement – four player-controlled and two processed by the Mac. The player controls – mouse guidance, movement in eight directions, racing car motion and platform game physics – provide everything you need to take charge of your character, albeit in a simplified way. For instance, the racing car, which is promoted as realistically mirroring the movement of a car, doesn't experience any inertia or natural deceleration – in other words, it's nothing like a car at all. The other three controls are adequate, but there is always the underlying sense that you are being controlled, not controlling.

As for the computer-managed movements, these are restricted to just two: bouncing ball or recorded movement in a path. The bouncing ball, although versatile, is also irritating. *Klik & Play* attaches a random bounce element to each ball, adding unpredictability to the rebound. Although you can reduce this, it is very difficult to eliminate, so balls and moving platforms occasionally spring away from the walls at awkward angles, probably crippling any delicate gameplay you've spent hours designing. Equally, don't expect your baddies to react in any 'intelligent' way – unless you spend so long adding conditions and routines

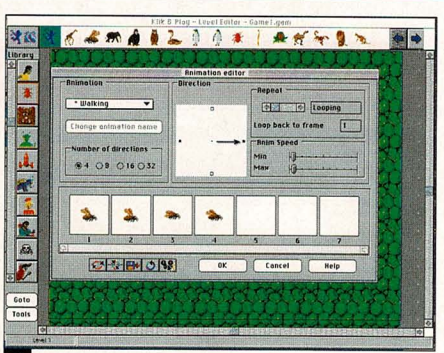
YOU CAN JUST KLIK 'N' PLAY TOO



1 Right, it's time for you to write the Mac's next big seller. These pretty emerald crystals have been chosen for the background. None of these tiles are obstacles – they just look good – so choose 'No' from the selection in the pop-up menu.



2 One of the baddies, a fly, has been placed on the right of the screen. Because he's computer controlled, his motions are restricted to 'ball' or 'path'. Making him a ball will ensure he bounces off the walls and stays in the game.



3 The fly has been programmed to go left and right across the screen. In the Animation Editor you can verify all the frames of his motion, ensuring he faces the right direction when he moves. Now it's time for you to put some obstacles in the way.

that you might as well have learned C programming instead. (C is more versatile too.)

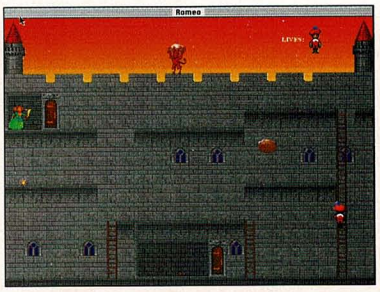
After you've fiddled with and tested the control method, it's time to struggle with the Event Editor. *Klik & Play* includes a clever Step-Through utility which plays the game for real, stopping when key events (sprite collisions or keyboard presses) occur. When these happen, you're escorted to a dialogue box full of icons that represent in-game sprites and possible actions to give them. To make a ball bounce, for example, click on the icon representing the ball, click on bounce, and the action is stored. A few hours later you'll have a 'finished' game.

Mac in schizo PC nightmare

Except for the odd niggle, which you could probably work around, making a game in *Klik & Play* sounds easy – so why is it a frustrating experience? Well, largely because it's a PC port.

Everything about *Klik & Play's* interface feels wrong and uncomfortable. As soon as the Storyboard Editor appears on the screen, the intuitive Mac interface has to fight to survive. For a start, the game area should be a separate window, with libraries and links to other sections placed in floating palettes. It's not. Everything is clumsily stuffed into one window, and while you can resize it, it lacks the normal resize box in the bottom right corner. Not that this matters too much, since the option doesn't work properly anyway – more of the window contents are revealed, but they shift slightly from their original position.

The icons themselves are bland and non-descriptive, and change style depending on the section you are working in. For example, the GOTO icon, which you use to jump from one editor to the other, normally looks like a standard Mac button (such as Cancel), so what's it doing floating aimlessly in the main window? And when you go to the Event Editor, the same icon



adopts a different shape, aping something out of Windows 3.1.

What's more, you can't select several items by **[shift]**-clicking, only by dragging a box around the items you need – another Windows limitation. Cut and Paste has bugs (paste a grouped selection and you get just half a brick, for example), and some of the dialogue messages are just bizarre: 'Please install QuickTime 2.1 minimum for musics,' for instance. This isn't mentioned in the manual, which is heavily geared toward Windows.

Worst of all is the clumsy way the controls are fudged to get around the lack of a second mouse button on the Mac. To edit a storyboard you have to double-click on the thumbnail, keep the mouse button down after the second click, *then* move to a pop-up menu choice. The continued click-and-drag mayhem will have you dragging out your old *Apple Technical Library* in desperation.

For expert coders, such failings may be acceptable – but *Klik & Play* is aimed at the novice who wants to throw something together quickly and easily. This shoddy interface is just confusing.

If Europress had been in a more honest mood when it christened this package, perhaps it would be called *Klik & Cuss & Wonder & Klik a bit more & Refer to the Manual & Throw things around the room & Cuss & Play (Maybe).* But that's not as catchy, is it? This has such huge potential, but wait for version two (if there ever is one), when the bugs and interface problems have been cleared up. **MF**

Klik & Play comes with either 10 (HD version) or 23 (CD version) demo games to show you what it can do. Some don't work, others are laughably dire, but there are a couple of gems. *Romeo* (above left) is a platformer, while *Bugs* (above) is an original title where you protect your computer from the horde of bugs in the system – a commentary on *Klik &Play's* current state?

KLIK & PLAY

Price: £44.99 (HD), £49.99 (CD). **Out:** now.
Requires: LCII or better, 4Mb of free RAM, System 7 or later, 256-colour monitor, QuickTime 2.1 for MIDI music, Sound Manager 3.1 for sound samples.
Contact: Europress Software on 01625 859333.

FEATURES 82%
Enough features to write a basic game, with lots of demos to try, but don't expect to write another *Marathon.*

EASE OF USE 53%
About as easy to understand as Windows 95. The interface is clumsy, confusing and horribly un-Mac-like.

DOCUMENTATION 76%
Good explanation, although leans toward Windows users. Over-hypes the 'just Klik and Play' slogan too much.

VALUE FOR MONEY 83%
Not bad, considering the features included.

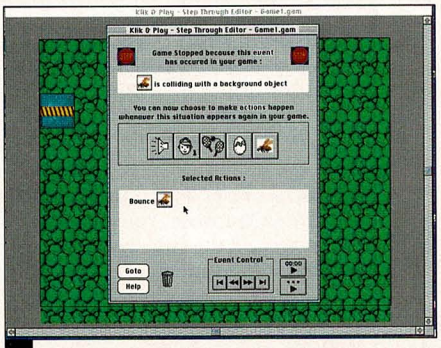
MACFORMAT RATING 73%

DECLARE YOUR INTERESTS

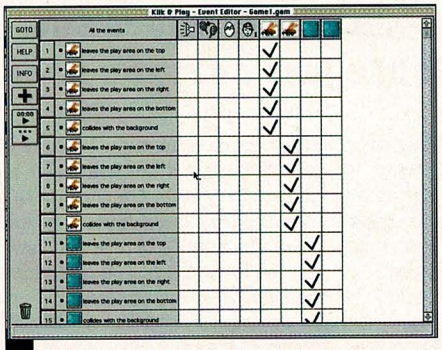
MACFORMAT'S *Klik & Play* reviewer actually appears in the manual as one of the artists responsible for *Klik & Play's* graphics, but denies it all now. Rest assured, his review remains objective.

KLIK & CREATE

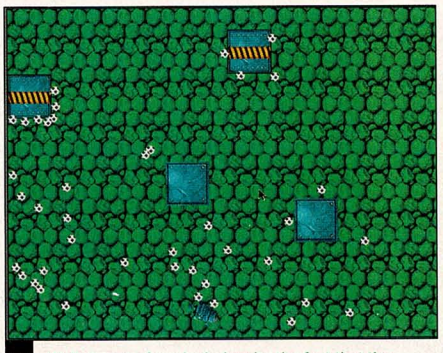
The multimedia-enhanced follow-up to *Klik & Play, Klik & Create,* has just appeared on the PC. Expect a Mac version (with similar PC-port limitations?) to follow.


Klik & Play - Step Through Editor - Game1.gam
Game Stopped because this event has occured in your game :
is colliding with a background object
You can now choose to make actions happen whenever this situation appears again in your game.
Selected Actions :
Bounce
Event Control
Goto
Help

4 An obstacle has been placed directly in front of the fly, shortening his flight path. The Step-Through Editor indicates any collision that has occurred, such as the fly hitting the obstacle, and enables you to alter the next few steps of the game accordingly.

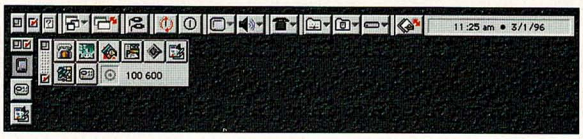


5 A few minutes later, two flies and two floating platforms have been added to the game. All these events were picked up by the Step-Through Editor, with appropriate instruction input. All you need now is Player One and a few nasty weapons.



6 Well, it sort of worked, despite the fact that the footballs are sticking to those obstacles, rather than bouncing off them. At least the flies have been destroyed by the onslaught of footballs fired at them. If only you'd remembered to make the footballs bounce…

OneClick



The **Launch Strip**, **Task Bar** and **System Bar** are three useful palettes supplied with *OneClick* – and they're always available.

Fed up with repetitive tasks? AppleScript too tough to learn for such a simple job? Long for the good old days of Macro Recorder? *OneClick* is the answer.

EASYSCRIPT AND APPLESCRIPT

You can actually embed AppleScript scripts in *OneClick* button scripts and dramatically increase the power at your disposal. Indeed, you could simply use *OneClick* as a great-looking interface for AppleScript routines. See our introduction to AppleScript, back in MACFORMAT 33.

Much of the work you do in any one application is repetitive – just think how much time you could save if you could turn these tasks into automated sequences.

If you're a *Photoshop* user, you might routinely open RGB colour JPEG images, convert them to CMYK, and set Auto Levels before saving the image again. You can put up with doing that once or twice a day, but not a dozen times in a row. Other tasks use functions that are buried irritatingly deep in the application's menu system. Carrying out a word count in *ClarisWorks 4*, for example, involves going to the **Edit** menu, finding the **Writing Tools** submenu, and selecting the **Word Count** option – all of which only takes a moment, but would be quicker still if the word count feature was a single button-click away. Script recorders are the simple answer.

Macro Recorder, which was part of the Mac Operating System up until System 6, was an early script recorder – but it's no longer given away with the System. Script recorders work by recording all your actions as a script, which you then play back by clicking on a button or using a keyboard shortcut. Script recorders interface with the application's menus, dialogues and buttons just like you do, which means they work with any application. The downside is that you can't record yourself clicking on words or pictures – *OneClick* can't see the screen in the same way as you can. A script that involves double-clicking on a word in a word-processing document won't work, because that word could be in a different place on the screen next time, depending on how far down you've scrolled.

For true integration with an application's functions you need AppleScript, but more superficial script recorders, such as *OneClick*, are evolving to meet the challenge. In evolutionary terms, *OneClick* makes Macro Recorder look like an amoeba.

The *OneClick* way...

OneClick is designed around palettes. Each palette can contain any number of buttons, each of which has its own script. You can create global palettes that are accessible no matter what application is running, and you can create application-specific palettes, which appear only when that application is active. Although you can record your own scripts, *OneClick* is also shipped with several ready-made palettes.

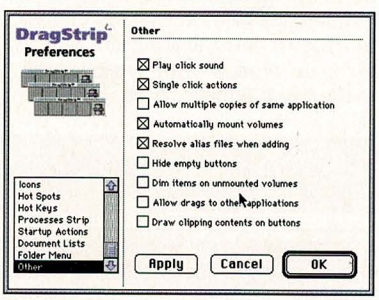
The global palettes include the System Bar, which contains buttons for changing sound levels and monitor depth, shutting down and restarting, cascading and tiling all open windows, and more – even a mini phone book. The Launch Strip is a rival for System

ONECLICK VS APPLESCRIPT

AppleScript interacts with applications on a very deep level, and script recording is based on 'significant' events – making it foolproof and precise. AppleScript is a standard tool among software developers. *OneClick* only interacts with applications superficially, and recording mouse movements and clicks is unreliable. On the other hand, you can only write AppleScript scripts for applications that are AppleScript-compliant; few applications are recordable, and AppleScript is tougher than quantum mechanics to get the hang of. *OneClick*, meanwhile, works with any application, is easy to use, and creates slick-looking floating palettes. *OneClick* does all the things you might have fondly imagined AppleScript should do, but if you're a developer, go for AppleScript.

DragStrip 2

***DragStrip 2* creates control strips – sets of one-click icons for launching applications, opening files and other tasks. Do these sound like just what you need?**



DragStrip offers dozens of preferences that help customise your strips – this is just one screen of many. It can't be faulted in terms of ease of use.

ALIASES OF ALIASES

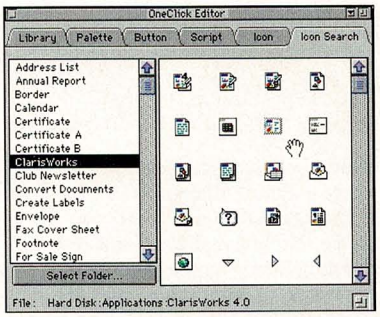
You cannot store an alias to an alias on a strip. *DragStrip* automatically resolves 'chained' aliases.

DragStrip grandly claims to be 'the ultimate Desktop organiser'. In practice, it enables you to create strips that contain buttons, which you click to launch applications, open files, store text, graphics or sounds and carry out other actions.

Each strip is in fact a window in the *DragStrip* application – and because the strips are not palettes, they will not float above other application windows. This makes using a strip more complicated than simply clicking on a palette. You first have to make it active – which means either being able to see part of its window to click on it, or making *DragStrip* active, then making the strip active – before you can click on the button. Long-winded for a 'time-saving' application.

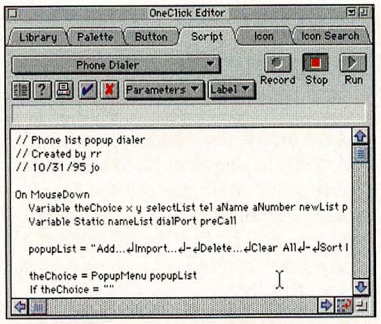
Creating strips is easy, and adding items to it easier still – you simply drag icons (folders, applications, whatever) from the Finder on to a blank button. You simply drag the resize box if you want to make it bigger, and the number of buttons increases automatically. Don't want one of the buttons? Drag it to the strip's Trashcan. You can drag buttons around the strip, and even from one strip to another.

Application buttons in *DragStrip* have a useful trick up their sleeves: they store a list of documents that have recently been dropped on to them, making it easy to open recently-used documents. Folder buttons are smart, too – click and hold down the mouse button, and you get a hierar-

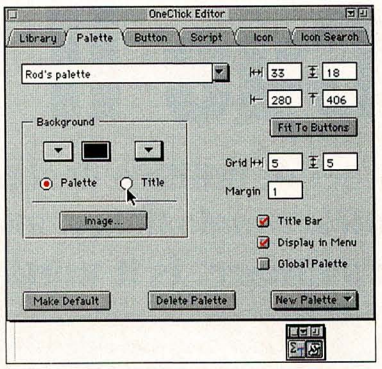


If your artistic talents don't stretch to designing icons using the built-in paint tools, raid other applications and files for suitable images.

Here's one we prepared earlier. Okay, it only has two buttons, but they're extremely useful for speeding up *ClarisWorks 4*. One starts a word count, while the other shows the **Styles** palette.



This is the script for the supplied phone dialler button. EasyScript, part of *OneClick*, is a programming language as well as script recorder.



7.5's own Launcher – simply drag an application or icon on to the Launch Strip to make it instantly accessible at all times. And the Task Bar is an alternative to the Applications menu – it displays icons for all currently-running applications, and can automatically hide inactive applications and quit applications without making them active first. A number of application-specific palettes are also supplied, including Finder, *ClarisWorks* and *QuarkXPress* palettes. New palettes are being produced all the time – the publishers' Web site contains the latest updates.

You can also record your own scripts and build your own palettes and buttons, using the *OneClick* Editor, which you access from a constantly available menu bar icon. The *OneClick* Editor is a slick tab-based dialogue that makes creating your own palettes simple – you can even assemble them for application-specific and global libraries of buttons provided with the package.

The script editing window is where it starts to get serious. *OneClick* has its own scripting language, called EasyScript, which isn't as easy to use as its name implies – tougher than HyperTalk but not as brain-numbing as AppleScript. It uses variables, conditional loops and all the other standard programming forms to offer lots of potential, enabling you to create much more inventive, powerful scripts than you could record normally.

Will it change your life?

You can add *OneClick* palettes to any application, and creating buttons and palettes is easy. The results look slick and professional, and this package is useful to both beginners and Mac experts. But how helpful?

The System Bar, Launch Strip and Task Bar are worth having alone for the price – even if you don't use the scripting functions – and automating routine tasks really does save you a lot of time. On the other hand, if you can only work with your System in a completely unadulterated state, warts and all, you won't like it. And you have to invest short-term 'tinkering' time to save on long-term tedium. But it's hard to imagine a more professional and easier-to-use script recorder than *OneClick*.

ROD LAWTON

ONECLICK

Price: $89 plus shipping. **Out:** now.
Requires: LC or better, 4Mb of RAM, System 7 or later.
Contact: WestCode Software in the US on 00 1 619 487 9200.

FEATURES 97%
Everything you could possibly need to automate tasks.

EASE OF USE 94%
Excellent, particularly for less experienced users.

DOCUMENTATION 95%
Few shortcuts here. A slim but thorough user guide is backed up by an impressively thick EasyScript manual.

VALUE FOR MONEY 85%
If you need automated shortcuts, this package has everything.

MACFORMAT RATING 91%

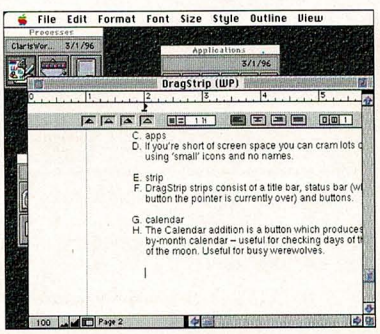
CRASH!

In testing, *OneClick* worked faultlessly with dozens of applications, except *FileMaker Pro 2.1*, which couldn't bring itself to work with *OneClick* installed. But this was on a Mac with an unfeasible number of Extensions, so it might well have been a complex conflict that you're unlikely to experience on your own Mac.

SEEING THE WOOD FOR THE TREES

With all these palettes on your screen, can you actually see anything else? Well, all the palettes can be collapsed to their title bars, or even single icons. Don't worry about closing them, either, because you can open them at any time from the *OneClick* menu bar icon.

The Calendar addition is a button that produces a pop-up month-by-month calendar, which is useful for checking days of the week and phases of the moon. Handy for busy werewolves.


File Edit Format Font Size Style Outline View
DragStrip (WP)
C. apps
D. If you're short of screen space you can cram lots
using 'small' icons and no names.
E. strip
F. DragStrip strips consist of a title bar, status bar (w
button the pointer is currently over) and buttons.
G. calendar
H. The Calendar addition is a button which produces
by-month calendar – useful for checking days of t
of the moon. Useful for busy werewolves.

DragStrip's strips are pretty and useful, but they are covered up by other windows and each other.

chical pop-up menu of the contents, up to five levels deep. Strips are also good places to store sounds, text and pictures – the Mac's Clipboard may be versatile, but it can only remember one thing at a time, unlike strips.

Strips can also store icons that trigger additions. *DragStrip* has an extensible architecture, so you can plug in external functions. *DragStrip* comes with several of these, including mini audio CD player, pop-up calendar, and quick access to sound level and monitor depth settings. One of the most useful enables you to group items together, so you can launch them with a single click. Programming additions like these is a professional programmer's job, but expect to see more appearing.

Is *DragStrip* 'the ultimate Desktop organiser'? It's useful, but the fact that the strips are windows and not floating palettes, and therefore complicated to use, is a big failing.

ROD LAWTON

DRAGSTRIP 2

Price: $39.95 plus shipping. **Out:** now.
Requires: LC or better, 1Mb of RAM, System 7 or later (7.1.1 for drag and drop).
Contact: Natural Intelligence in the US on 00 1 800 999 4649.

FEATURES 80%
Lots of customising options and useful features, and it offers a handy 'additions' architecture.

EASE OF USE 69%
Strips are easy to set up but a little too hard to get to in use.

DOCUMENTATION 78%
Easy to follow. Lots of information on customising.

VALUE FOR MONEY 85%
Not expensive, but is it genuinely useful? Shortcuts need to be quicker to use than this.

MACFORMAT RATING 75%

NEAT AND TIDY

Do you like your to have your windows arranged 'just so'? Don't worry – you can anchor strips to the edges of your monitor.

On Cue II v3

Yet another set of utilities designed to make using your Mac quicker and slicker, and improve on Apple's own System software. Is it worth the money?

On Cue comprises eight utilities, some bigger than others. While they're marketed as a package, a couple of them also work independently.

On Cue Menu is most useful. It creates a constantly-available custom menu at the end of your menu bar. You can add documents, folders and applications to this menu, so they're never more than a mouse-click away, and you can create hierarchical submenus (up to five levels) and 'multisets' of files to open simultaneously.

After *On Cue Menu*, *Key Launcher* is an anticlimax. It simply enables you to find or open any file by typing part of its name (you can use wildcards). *On Task* is a modest utility that enables you to switch between running applications by pressing **[option]-[tab]**, and you can use it to quit selected applications or automatically hide inactive applications. It's no better than the **Applications** menu, though.

ONtheLEVEL is more promising. You can use it to permanently or temporarily set sound level and monitor depth for specific applications. *Smart Open* is a more ambitious piece of programming, and works in conjunction with *On Cue Menu*. It extends the **Open** dialogue of any application to include menus that display recently-used files and folders specific to that application. You can add items permanently, too. There's also a **Tools** menu, which offers a **Maximised** dialogue that includes Finder-style file information like creator, date last modified and size. You can select more than one item at once; you can move items without leaving the dialogue; and you can trash stuff without a trip to the Wastebasket. You can also examine file and folder comments and information, and create aliases.

On Disk is really *Smart Open's* dialogue made available from the **Apple** menu and via a keyboard shortcut. This time you can move, resize and zoom the window, but there are few other practical differences.

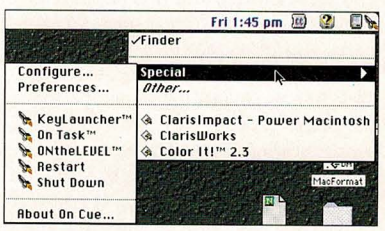
QuickFinder is initially strange. It's a single scrolling dialogue for listing and opening files with the same creator, regardless of where these files are in your disk/folder hierarchy. It's a rather neat alternative to putting all your *QuarkXPress* files, say, in a single folder. How practical it will be once you've accumulated a couple of hundred *XPress* files is another matter. Last, *On Startup* is a simple Extensions manager with which you can enable and disable selected Extensions, and even save sets of Extensions. Much like Extensions Manager, part of System 7.5.

The eight utilities are a real mixed bag. The overall impression they give is of a product that the Mac could really have used five years ago, but which has since been largely superseded by new System updates. *On Cue Menu*, *Smart Open* and (possibly) *ONtheLEVEL* are handy, but the rest are either no better than the current System equivalents or require quirky working habits.

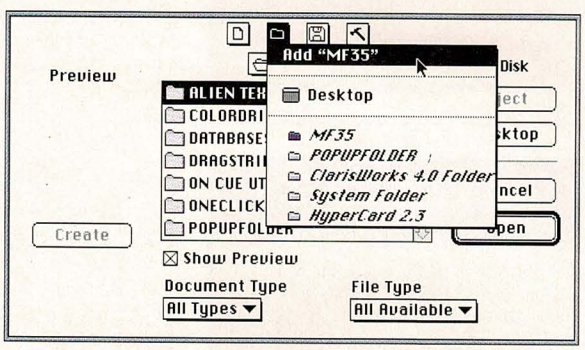
ROD LAWTON

ANY IMPROVEMENT?

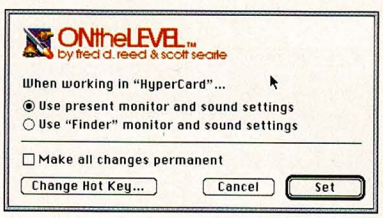
The Mac's System offers a surprising number of useful facilities, so make sure any fancy utility collections actually improve on it before you shell out for them. *On Task* (part of *On Cue II*) is a pop-up dialogue that enables you to choose which of the currently-running applications to make active. However, the **Applications** menu, which we've all had since System 7, is just as quick.



On Cue Menu in action. You also configure other modules from here. Once your menu is set up, it's very usable. Once it's set up...



Lots of utilities add widgets to **Open** and **Save** dialogues, but *Smart Open* is better than most. The MF35 folder is commonly used this month, so we're permanently adding it to the **Folder** menu.



ONtheLEVEL is handy for *HyperCard*, because you can set it to automatically launch in mono. It could be useful for mono DTP-ers struggling with slow Macs, too. Other uses? Loads. Like, er... um...

ON CUE II v3

Price: £116.33 **Out:** now.
Requires: any Mac, System 7 or later.
Contact: FasTrak on 01923 495496.

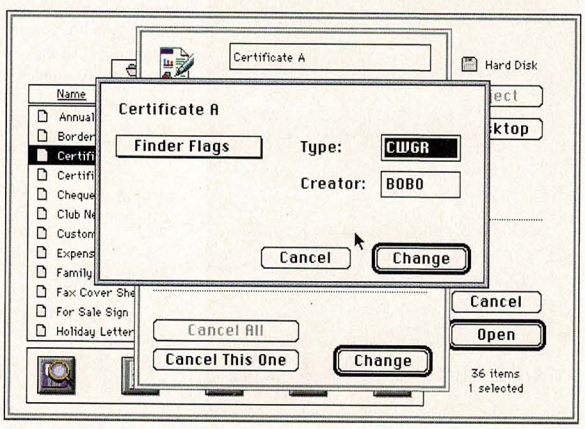
FEATURES 69%
Two excellent utilities plus a few minor widgets of questionable value.

EASE OF USE 73%
Configuring *On Cue Menu* is rivals *The Krypton Factor*, but the rest is fairly straightforward.

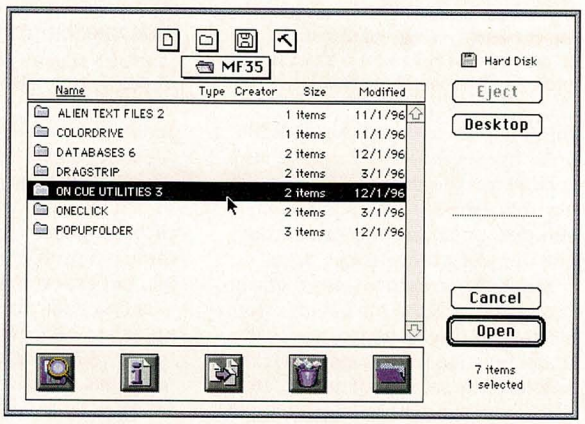
DOCUMENTATION 80%
Thorough, although it shares the software's dated feel.

VALUE FOR MONEY 60%
Old-fashioned solutions to problems that don't exist any more.

MACFORMAT RATING 67%



Using *Smart Open* you can discover and fiddle with file types and creators, and their Finder Flags – whatever they might be.



Smart Open's maximised **Open** dialogue is a major improvement over the standard offering. The buttons along the bottom enable you to find files, get info, duplicate, move and trash files and create new folders for them.

PopupFolder 2.0

If you're a System 7.5 user, you'll know how handy pop-up folder menus are – but they only work to five levels. This utility works to 16, and does more besides.

PopupFolder is the opposite of *On Cue II*. Whereas *On Cue II* promises heaps of functions that actually boil down to not very much, *PopupFolder* sounds like it only does one thing, yet in reality does at least half a dozen.

Principally, though, it does what it says: gives you up to 16 levels of nested, hierarchical folders. When it's switched on, little downward-pointing arrows appear on your folder icons to remind you of the fact. Whereas hierarchical folder menus only work from the Apple menu in System 7.5, *Popup's* work anywhere in the Finder – including window title bars and even Open and Save dialogues in applications.

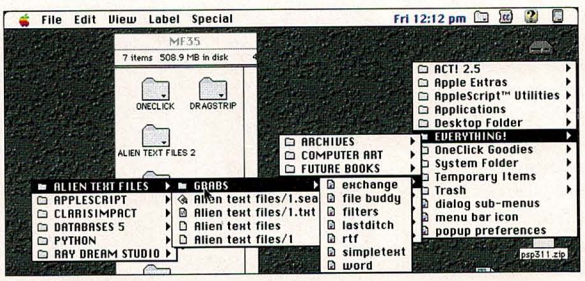
To use these menus, click on an item and keep the mouse button pressed. In a second or so, a pop-up menu of the folder contents appears, and without further delay you can then go down the hierarchy to find the item you want. To move any Finder item to a new location, drag it over any folder icon or window title, and then through the hierarchy to its chosen destination. But that's not all. You can 'grab' an item in a menu, and drag it to a new location using the same method. This is, however, only possible if you have System 7.5 or the Drag Manager Extension.

So is that it? Not by any means. *PopupFolder* also creates a new menu bar icon, in which you can store all your favourite items. To add an item to it, all you have to do is drag the item over this icon. You can, if you wish, configure the Apple menu to work in the same way. There are modifier keys too, so that you can copy items instead of moving them, and even create an alias.

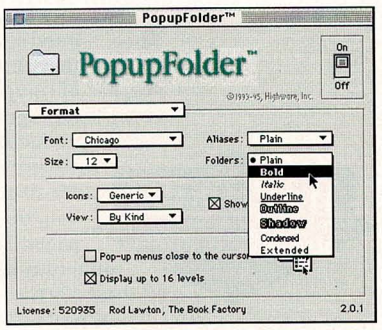
Even more? Well, do you find dragging through layer after layer of submenus tricky? Your mouse does get less easy to control when you're pressing the button, and it's frustrating when you accidentally release the button at the wrong moment. Well *PopupFolder* includes an option that enables you to change how the mouse button makes menus react. You can choose Normal operation (click and drag to select options); Click-Drop (click once to drop the menu, release, then click again to select an option); or Auto-Drop (the menu drops down as soon as the mouse pointer is over it – click once to select an option). PC owners are used to systems like these last two, and – sacrilege! – they really are helpful. *PopupFolder's* menu options don't just work with its hierarchical menus – they work on the menu bar (in all applications), and on pop-up menus in dialogues and palettes.

Well now, that really must be it? Not quite. *PopupFolder* also gives you enlarged Open and Save dialogues, with a taller window for fitting in more items. You can also add an icon bar for shortcuts to your favourite folders, files and applications. Needless to say, folder icons provide more hierarchical menus.

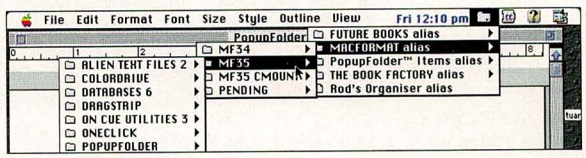
PopupFolder is quite something – not least because it hides so many functions behind a misleadingly prosaic name. It did have its flaky moments on the test Mac – it didn't display custom icons properly, and the icon bar in Open and Save dialogues broke slightly on one occasion. Otherwise it was bulletproof and worked with everything. **Rod Lawton**



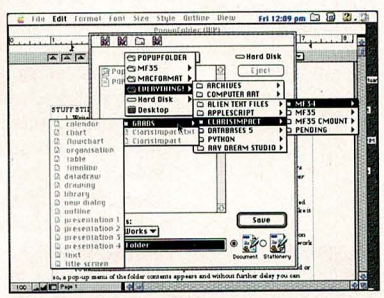
So you think System 7.5's hierarchical Apple menu is smart? *PopupFolder* gives you folder menus 16 levels deep anywhere in your Finder.



PopupFolder is endlessly configurable via its control panel. In this dialogue you can choose the font, size and style for your folder menu names.



New for version 2.0 of *PopupFolder* is the **PopupFolder** menu. Here you can store all your favourite items ready for action.



PopupFolder even gives you hierarchical folder menus within the Open and Save dialogues in your applications.

Improvements over 1.0

- Re-organised control panel.
- Up to 16 sub-levels of folder menus.
- Grab key for moving and copying items within folder menus (System 7.5 or Drag Manager needed).
- Enlarged Open and Save dialogues with custom shortcut icon bars.
- Supports custom icons (allegedly).
- PopupFolder menu on menu bar for frequently-used documents, applications, folders and aliases.
- New mouse menu control options – Click-Drop and Auto-Drop.
- Gives a further 11 hierarchical levels on your Apple menu compared to System 7.5 – and it enables you to drag items on to the menu to add them to it quickly and easily.
- Uses icons in folder menus.
- Enables you to sort folder menu items by name, type and label.
- You can group folder menus closer together, meaning that you can fit more on screen.

PopupFolder 2.0

Price: £45.83. **Out:** now.
Requires: any Mac, System 7 or later. (You need System 7.5 for 'grab' feature.)
Contact: Softline on 0181 401 1234.

Features 96%
Many more useful features than the title suggests.

Ease of use 84%
Basically very simple, but some features are trickier to figure out.

Documentation 72%
Short and to the point. More walkthroughs or examples would help.

Value for money 80%
It's not cheap, for a utility, but the functions it offers are worth the money.

MACformat rating 87%

YES, BUT IS IT USEFUL?

Hierarchical folder menus are clever, but the deeper you go, the more annoyed you'll be if the mouse slips. The ever-present PopupFolder menu and the Click-Drop menu options are, however, excellent.

WHY OH WHY?

Why are the standard Macintosh Open and Save dialogues so titchy? And why does it take a third-party publisher to produce a decent-sized one?

Playtoons

Sierra introduces a range of storytelling CD-ROMs designed to be collected and combined. Derek Smith returns to his childhood (a short journey).

Photos from Derek's latest family get together. Ah, sorry – they're pictures from *Uncle Archibald*.

MACFORMAT Classic

Since the success of Brøderbund's *Living Books* CDs, there has been a steady flow of companies eager to jump on the bandwagon with similar multimedia products. The majority of these provide children with a story, usually in cartoon fashion, through a sequence of pages. Each page contains numerous hotspots and clicking on these starts a related animation.

These products have often reached high standards – *What's My Story?* scored 91% in MACFORMAT 34, for example. However, costing several times as much as good old-fashioned books, are they being purchased by parents trying to justify spending money on a Mac rather than on private education for their offspring?

SPIROU

Spirou, the star of *The Case of the Counterfeit Collaborator*, is a very famous cartoon character. Extremely well known. In many countries. Well, in France, at least...

Playtoons stories have 12 to 15 pages each, and to read through one and find all the hotspots takes around an hour. This may not seem long, but the attention span of the average child is unlikely to rival the new Severn crossing in length. The stories are certainly fun, and children will want to return to them in the same way as a favourite book, though whether you drag your multimedia setup to their bedside every night is your decision.

You can read through the whole story, or simply revisit your favourite pages.

The animation is excellent – equal to any related CD on the market and much better than the tat available on Saturday morning television. At around £25 each, the pricing compares favourably with similar products, although for this amount of money it would be good to see two or three separate stories with costs reduced by the sharing of common graphics.

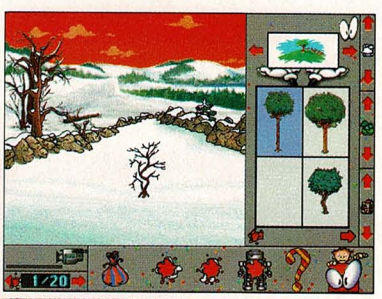
Frequent complaints with these multimedia products concern the parade of grating American accents that tend to be used. *Playtoons* though are made in France under the direction of a Briton, and as such the CDs are fully Anglicised, with English spellings and narration. Taking this Euro co-operation further, the whole story is also recorded in French, and you can swap between the languages at will, making it ideal for encouraging children with their French lessons. However, the stories are of such complexity that to make use of this you will also need to be fluent in French yourself.

Playtoons has another ace up its CD-ROM sleeve, which makes it stand out from similarly priced packages in this field: once you've read the story, you can create your own. You can use up to 20 pages, each with a different background selected from a huge variety, and you can add mood music from the range used in the stories.

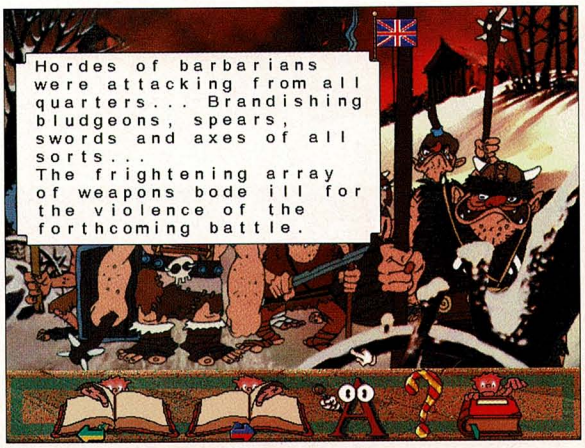
When the *Playtoons* story is over, the knights, monsters and other characters make great players in children's own inventions. You can place objects and characters from the story you've just read on to the scene, then direct the characters to walk around and interact, either with objects or each other. You can add text to the pages, and record your own narration if you have an external microphone. All of this enables children to formulate their own stories, a vital component in development and now a significant part of the National Curriculum. Creating these is more complicated, however, and adult help is almost always needed – so why not enjoy the process and spend some quality time with them?

Crucially, *Playtoons* is an ongoing series, with material from the different CDs designed to work in synergy. If you buy further CDs, not only do you get new characters, backgrounds and objects, but you can also use them with those you already have. Sierra promises to release a total of 12 titles by the end of next year, making the CDs ideal presents to build into a comprehensive collection.

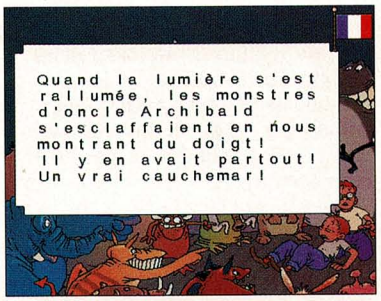
This collection of CDs is ideal for entertaining demanding little darlings



Construct your own sophisticated stories using animated characters and objects.


Hordes of barbarians were attacking from all quarters... Brandishing bludgeons, spears, swords and axes of all sorts... The frightening array of weapons bode ill for the violence of the forthcoming battle.

The stories further your children's learning by making use of a variety of more complex words – an ideal way to improve their reading skills.


Quand la lumière s'est rallumée, les monstres d'oncle Archibald s'esclaffaient en nous montrant du doigt! Il y en avait partout! Un vrai cauchemar!

The stories are told in French as well as English. You'll have to be fluent to help your kids read it.

Rich colours and smooth animation keep adult helpers as attentive as younger viewers.

– it's just a shame that each CD contains only one story.

Uncle Archibald

The first story in the series features two young boys, who, while visiting their Uncle's spooky house, boot up his PC so that they can read the stories he has written on it about imaginary monsters. An unfortunate accident in the lab brings these monsters to colourful life. Tsk, tsk – should have used a Mac, eh?

Uncle Archibald offers enough scary material to interest children without worrying sensitive adults. The hidden animations are in the style of *Tom and Jerry* slapstick and are highly entertaining, making this is a great introduction to the range.

The Secret of the Castle

A mystery, this time set in medieval days, *The Secret of the Castle* is similar to the comical *Uncle Archibald* and should keep children hooked as they try to discover the secret. Unfortunately this story tips the scales too far in the direction of entertainment, and slightly away from educational value. It would have greater use as a learning tool if the hotspots revealed more facts about the life and times of the people who lived during the medieval period.

The Case of the Counterfeit Collaborator

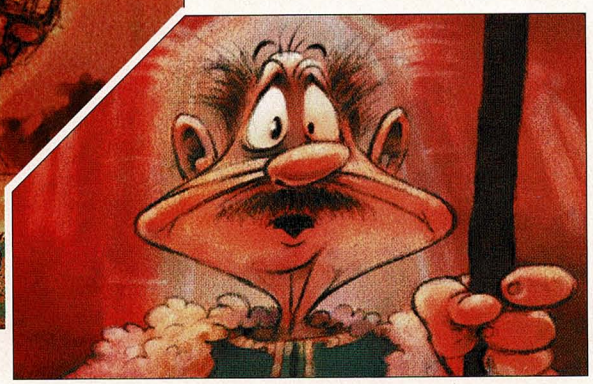
Although aimed at the same four to ten year old age range as the other *Playtoons*, this CD best suits the upper end of the scale – younger children may not even understand the title. Unlike the others, it's based on a real comic strip story, which shows through when you click on the hotspots. In *Uncle Archibald* and *The Secret of the Castle* this action invokes an animation, whereas in *Counterfeit Collaborator* it often sparks off a separate cutaway scene. Unfortunately these clips don't expand enough on the core story – there would be more opportunity for interaction if they revealed clues to the mystery and gave you additional incentive to search for them.

Although it's less humorous than the other two titles, *Counterfeit Collaborator* provides you with much more story for your money. Contained within its 15 pages is enough information to keep older children interested, and the mystery it chronicles is genuinely intriguing to readers. **MF**

PLAYTOONS

Price: £24.99 each. **Out:** now.
Age range: four to ten years.
Requires: LC475 or better, 4Mb of free RAM (8Mb preferred), System 7.1 or later, 13-inch, 256-colour monitor, double-speed CD-ROM drive. PowerMac-native.
Contact: Sierra on 01734 303322.

MACFORMAT RATING **90%**



Not entirely for children, *Playtoons* feature a wide range of drawing styles, adding to the pleasure for their adult helpers.

BACK ISSUES

Kids' multimedia products have been covered in several recent issues of MACFORMAT. For more details about these, see page 115.

WHO'S HE?

Before Derek Smith started writing for MACFORMAT, he spent several years in a comprehensive school, teaching Information Technology.

TECHNICAL SUPPORT

Sierra offers free technical support for all registered products. You are, however, unlikely to get stuck.

Kevin the Kangaroo

Take a trip down under with Kevin as your guide, and meet some of his neighbours – both at home and away – in this multimedia tour of the Aussie outback.

It's the snakes and ladders game, and poor Klip is behind bars. Entertaining diversions galore.

Bizarre and manic, *Kevin* comprises six children's activities that deal with the Australian experience in general, and kangaroos in particular. In common with similar multimedia products, such as *Playtoons* (reviewed on page 96), it contains hotspots that you click on to activate an animation. There are only a few of these, but clicking the same hotspot more than once often produces different animations picked at random.

Kevin begins with a slide show featuring interesting snaps of Australia. Alas, these come without details or explanation, making them irrelevant from an instructional point of view. In an attempt at 'education', an Aborigine boy tells you unrelated facts about Australia between each picture. This section contains some interesting titbits, but is told in an annoying American accent – an obvious drawback in software designed to inform your kids about the Australian experience.

Turtle with engines

The slide show is a worthy attempt at educational enlightenment, but from here the activities become joyous romps into silliness. Take the Kangaroo Cave, where you have a selection of animals such as centipede, emu, turtle, kangaroo and Boeing 747. Eh? The idea is that you put any two of these into the giant kangaroo's pouch to create a hybrid animal, very much in the style of the joke. So what do you get when you mix a kangaroo with a sheep? A woolly jumper. In the Kangaroo Cave you can end up with an eight legged kangaroo, or a turtle with engines. Weird.

Alternatively you can try spotting which animals are indigenous to Australia (the pink elephant may be an impostor). There's also a one or two player snakes and ladders game, with the characters Klip and Klop, in which interaction is limited to clicking on the dice in turn – hardly absorbing, even if it is fun. Other activities include two painting games: in the first you are invited to paint by numbers over scenes involving – yep – kangaroos, while in the second you assemble pieces of clip art into a finished picture. All of the activities are great fun, and most are wonderfully strange.

While you may be confused by it all, it's likely that most under-eights will be on exactly the right wavelength to appreciate it.

As the CD is made in France, and aimed to reach as wide an audience as possible, you get to choose between French, German or English as your basic language. Don't rush out and buy this for your child, hoping they'll become multilingual by the time they start school, though. There's no on-screen text, and the language choice only affects the narration – which moves too fast to be useful for learning a language.

The real problem is that although it's enjoyable, there just isn't that much of it. When you look at the CD's Desktop window, it informs you that it holds 360Mb of data – about average for a multimedia CD. Closer inspection reveals that 325Mb of this is an interactive catalogue of the company's other products.

The RRP of £19.99 reflects the fact that the quality is not quite up to the level of some other kids' multimedia products – rather, *Kevin the Kangaroo* is aimed more toward a budget market. And, to be fair, products like this certainly fill a hole in the market for cheaper CD birthday presents. If you want some wacky fun and a product that your children can use with only a little of your help, then *Kevin* is fine. If you want to educate your offspring, then *Playtoons* would be a better option. If you want them to learn about Australia, sit them down in front of the telly and switch *Neighbours* on. Serve 'em right.

DEREK SMITH

THERE'S MORE

In the same series there are three more CDs, *Louis the Lion*, *Barry the Bear* and *David the Dolphin* – can't wait for *Alfred the Armadillo*.

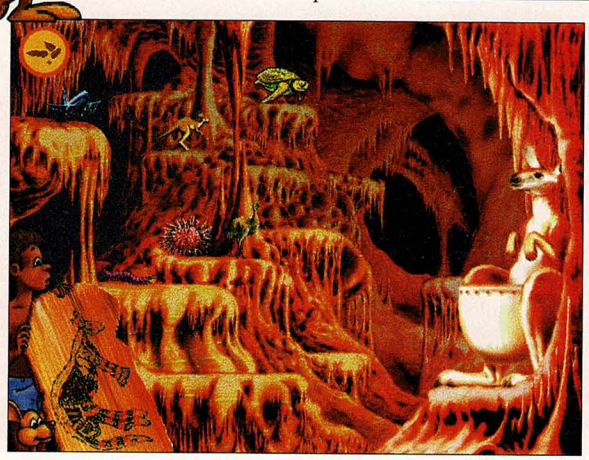
BRITISH

Ocean says it is looking at the possibility of anglicising future CDs. This would, of course, increase the cost.

KEVIN THE KANGAROO

Price: £19.99. **Out:** now.
Age range: four to eight years.
Requires: LC or better, 3Mb of free RAM, System 6.0.7 or later, 13-inch colour monitor, CD-ROM drive.
Contact: Ocean on 0161 832 6633.

MACFORMAT RATING 75%



(Left) Dropping these creatures into the magic pouch produces interesting results.

(Far left) Click on any of these creatures and you hear a recording of their voice. Click on the Aborigine and he says, 'Get me out of this picture.'

Peter & Julie's Colors Adventure

The world has been robbed of its colour, and it's your job to guide Peter and Julie to the Rainbow Bird and save the grey planet.

Finding a spelling mistake in the title of an educational game is not the most auspicious start. You may think we're being over-critical, since 'color' is the correct American spelling, but this isn't an American product. Like *Playtoons*, this is a French product made for a multilingual market; unfortunately, it fails to recognise that the UK is not the 52nd American state and its narration uses American children's voices – yeuch.

Colors Adventure is a multimedia CD of discovery. The first thing you have to discover is what on earth it's about, since the handful of sentences purporting to be a manual give no clue. You're initially greeted by the main characters, Peter and Julie, standing in the rain. Your first step will doubtless be to try clicking on parts of this picture, to produce animations. Up to this point, *Colors Adventure* is comparable to *Playtoons*, *Living Books*, and similar multimedia stories that are told one page at a time – but don't be deceived. After some pointing and clicking, you stumble upon the trapped Rainbow Bird (who bears an unnerving resemblance to the Cadburys Parrot). He explains the plot to you and outlines your task. With this purpose in mind you can move on to the main screen.

From here on it becomes apparent that *Colors Adventure* is not so much a story to be told in sequence as a land to be explored freely. From the main screen, you can enter any one of six coloured doors by solving a simple puzzle. This is not as easy as you might expect, and took ten minutes to accomplish – even without the aid of someone under the age of eight. You may find yourself having to help with this part in order to progress with the story. Each coloured door leads to another screen, and a picture packed with waiting animations.

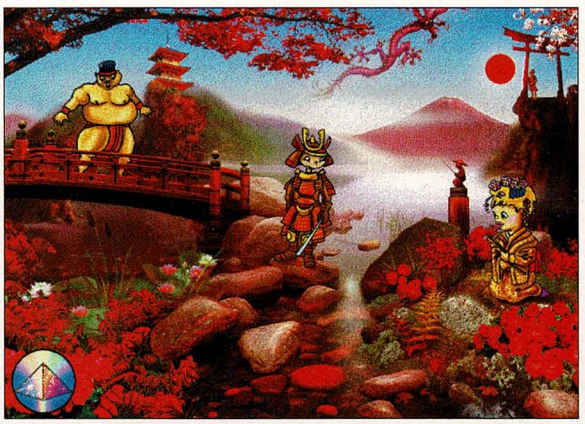
Clicking on the right part of each of these six screens leads you to a hidden activity, including a painting studio, a memory test and a puzzle game. You would expect these to be based around colours – given the title of the CD – but several of these activities (including doll dressing) are out of place, breaking away from the common thread. The six screens that lead to the activities are also only vaguely related, evoking scenes from the jungle, the Middle East, and Aztec civilisation. This falls down when locations such as a haunted castle – which appear to be unrelated to colour – leave you searching for a theme.

If owls are so smart – as they are usually portrayed in stories – then why do they eat mice? And without a napkin, too.

Now get on with it

Eventually you'll succeed in your task – to find the Rainbow Bird and make the world (well, the main screen, at least) a better brighter place. Once you've accomplished this, you can still visit the rest of the screens and play the activities, although the original sense of purpose has gone.

This main screen leads to all the fun. The world is grey – it's your job to rescue the Rainbow Bird and put the colour back.



If this sumo wrestler is looking particularly perturbed, it's probably because his loincloth is too tight.

Colors Adventure is an enjoyable romp with some pleasant, if odd, things to do. It will keep your kids absorbed, and they are likely to want to return to it – although for £19.99, six screens and activities might not strike you as great value. Educationally, the package is disappointingly weak. If more emphasis were placed on the theme of colours, then there would be the opportunity for children to become more focused on a single subject. As it is, one game sees you working out which two colours mix together to give a third – great learning stuff – but the next involves trying to work out a secret code.

While there is plenty to be gained from this CD, it is unlikely to be your first choice, particularly in comparison to other products in the market. Think how much paint and paper you could buy for this amount of money. Hmm, then again, maybe it's cheaper than a new carpet.

DEREK SMITH

COLORS ADVENTURE

Price: £19.99. **Out:** now.
Age range: four to eight.
Requires: LC or better, 3Mb of free RAM, System 6.0.7 or later, 13-inch colour monitor, CD-ROM drive.
Contact: Ocean on 0161 832 6633.

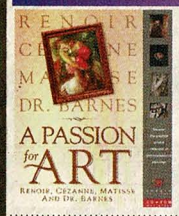
MACFORMAT RATING 72%

EVEN MORE

In the same series there are two more CDs, *Peter's Numbers Adventure* and *Peter's Magic Adventure*.

EMERALD Creative Technology

REFERENCE



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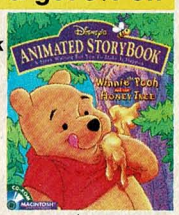

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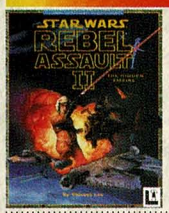

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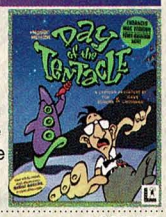

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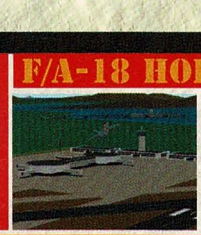

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PB Bear's Birthday Party

After an edutainment-infested 1995, what does 1996 hold for children's software? Can Dorling Kindersley's latest offering provide more than just the 'bear' necessities?

MICROSOFT TOYS

Until recently, Dorling Kindersley licensed its products to software giant Microsoft. This might be why *PB Bear's* crisp design sense looks familiar.

TIME FOR SCHOOL

If you require something for older children, check out Dorling Kindersley's equally excellent range of reference works. *The Encyclopedia of Science*, reviewed in MACFORMAT 32, scored 89%. Although it's more expensive at £59, it provides an informative, enjoyable way to end the tedium of science homework.

Technology is evolving at lightning speed, and Mac software is now capable of reaching previously unimagined heights in the education field. It is, however, the same old story – rather like breakfast cereal – that while everyone knows dry, fibrous muesli is good for you, the majority would rather choose the fun, sugar-coated stuff, especially if it goes snap, crackle and pop too. Still, it's obvious that edutainment is the way of the future, and if that is the case, what does 1996 hold?

MACFORMAT Classic

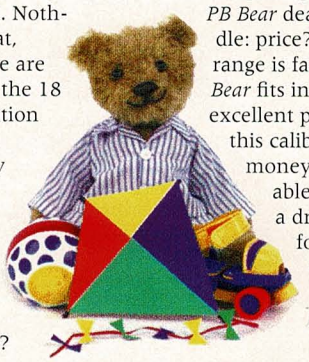
Foretelling the future is always tough, but one prediction lies with this latest offering from Dorling Kindersley. Instead of aiming for a cavernous age range, Dorling Kindersley has pinpointed the three year old age group. The result is *PB Bear's Birthday Party*, a brightly-dressed interactive storybook that makes all the right noises.

The lead role is taken by the eponymous PB Bear, unbearably cute star of his own TV show. He, along with the story and activities, are for once not just created out of paint-package approximations and blurred scans. The impressive cover doesn't lie, and from the moment he gets out of bed to the day's close 18 pages later, PB Bear's birthday adventures are exactly as you would expect them to appear on children's television.

But what about the interface? The only mouse *PB Bear's* audience are likely to have come across is called Mickey, and is emblazoned on their jim-jams... ahem. But the authors (no one so vulgar as a *programmer* could've created this) have made it simpler to use than A-B-C. Scattered in the easy-to-read text are various pictures – PB himself, a bow tie, a birthday cake – and a click on each results in a sound effect or animation. Nothing big or clever about that, you might think, but there are seven of these on each of the 18 pages, plus a main illustration crammed with hidden hotspots. It is immediately obvious that, despite being aimed at the very young, there has been no compromise on the quality of this product.

So how does the educational content shape up? Recently, the lack of any real storytelling has been one area where storybooks have received bad press – a criticism that Dorling Kindersley has apparently noted. Not only do *PB Bear's* animations sneak new words into your child's vocabulary, but the combination of spoken word and simultaneously highlighted text is a fantastic push towards reading. Add to this the educational games scattered throughout the birthday party – from helping PB bake a cake to choosing his bathrobe – and *PB Bear* appears to have it all covered.

Both quantity and quality are more than adequately covered, so how does *PB Bear* deal with the final hurdle: price? Dorling Kindersley's range is fairly priced, and *PB Bear* fits in nicely – £29.99 is an excellent price for software of this calibre, offering value for money. Sure, you might be able to get two volumes of a dreary maths program for the same price, but why buy more when the bear essentials is all you need?



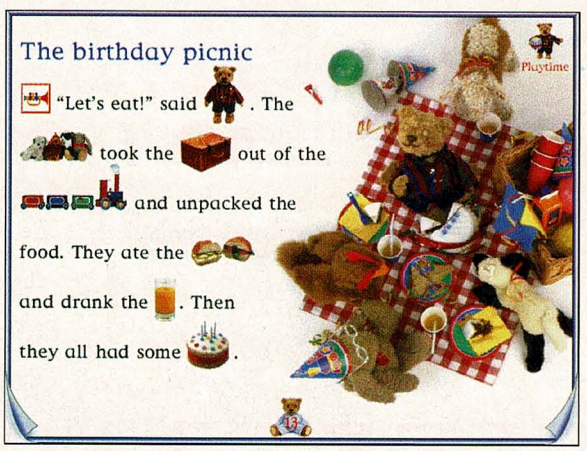
MIKE GOLDSMITH

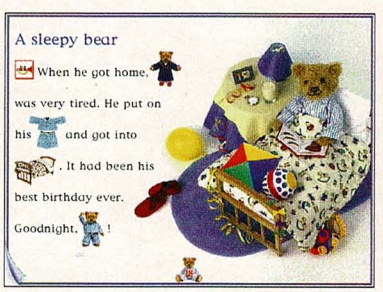
A special breakfast
decided to have a special birthday breakfast. He went to the kitchen and sat on his . He ate some , and some and , and drank some .

Even on his birthday, PB isn't allowed a lie-in.

With all that breakfast he's just eaten, you'd think PB would have no room for birthday cake.

Choose the right dressing gown for PB, or risk leaving him a little bear (sorry).


The birthday picnic
Playtime
"Let's eat!" said . The took the out of the and unpacked the food. They ate the and drank the . Then they all had some .



A sleepy PB. Let's face it, if you'd eaten that much jelly and ice cream on your birthday, you'd probably head off to bed early too...

PB BEAR

Price: £29.99. **Out:** now.
Age range: around three years.
Requires: LC or better, 4Mb of RAM (6Mb recommended), System 7 or later, 256-colour, 13-inch monitor, CD-ROM drive.
Contact: Dorling Kindersley on 0171 753 3488

MACFORMAT RATING **92%**

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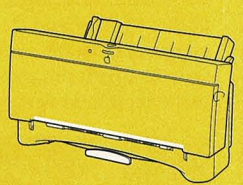

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Digby's Adventure It's a Bird's Life

Emma Forbes does shampoo, Will Carling does meat-free food, Shelley Duvall does... children's multimedia? What in star endorsement's name is going on?

HIT THE RIGHT NOTE

If it's music you want, *It's A Bird's Life* includes 11 Sing Alongs, and *Digby* incorporates an interactive studio for you to record and play back music. There's more information about these features in the review of *Sitting on the Farm* and *The Cat Came Back* just over the page.

BUY ONE – GIVE ONE FREE

If you buy and like either of these edutainment packages, simply return the accompanying form to CentreGold, who'll send a free copy to your child's school.

Three titles are spread out on the shelves before you. Do you buy *A*, noted for its exemplary gameplay; *B*, packaged as it is with a three-inch thick manual; or *C* with its super picture of Philip Schofield on the box?

Could endorsement of computer products ever work? Maybe the star quality helps with *I-could-look-like-her* cosmetics or *he's-healthy-and-he-eats-it* groceries, but software? Shelley Duvall is better known as the wailing wife to Jack Nicholson's psycho in *The Shining*, so why should you trust her recommendation? Well, because the titles are good, that's why. Far from being merely a painted smile beaming out from the packaging, a digitised Ms Duvall is involved throughout both of these releases.

Digby's Adventure

Belonging to Shelley and her on-screen partner Dan, Digby is a Yorkshire terrier who might not weigh much, but is worth his weight in troublesome gold. He's an inquisitive mutt and, not content with being the star of more usual storybook fare, he decides that one interactive tale is not enough. Depending on where you decide to take Digby for walkies, he chases butterflies with pal Skunkly, runs away from home following an unsuccessful dog show, and scarpers from a scary lawn mower. Each anecdote is a self-contained adventure, with cartoon-quality animation, cute characters, and a wealth of games and puzzles. The quality is unquestionably good but, more importantly, Digby has a longevity that'll see him scampering around your monitor long after lesser CD-ROMs are gathering dust on your software shelf.

It's a Bird's Life

Digby, Shelley and Dan make a re-appearance in *It's a Bird's Life*, a similarly in-depth program. *Bird's Life* isn't just a feathered version of the entertaining *Digby;* instead it places the emphasis firmly on education.

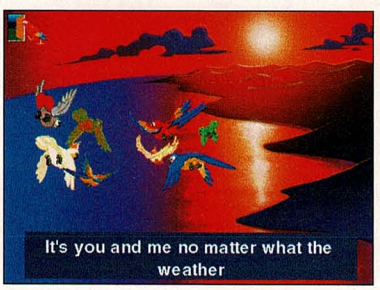
When their house is destroyed by fire, Shelley and Dan's pet birds fly south to their spiritual home – the Amazon rain forest. The klaxon sounds and maps of the rain forest, alongside high quality animations of the region's inhabitants, appear as you click through an impressive 60 pages of story. Not only are you given explanations of how a parrot flies, but each bird has a character to ensnare your child's imagination and gently push the story's educational content. With eight birds to choose from, each with a distinct personality, *It's a Bird's Life* is a blend of fact and fantasy that deserves its edutainment tag.

So could endorsement work? Who knows the real reason behind Ms Duvall's involvement with the *Kids Learn* range? Whatever, after this showing it might be time to drop the cynicism and look to the stars. **MIKE GOLDSMITH**

DIGBY AND BIRD'S LIFE

Price: £19.99 each. **Out:** now.
Age range: three to nine.
Requires: *Digby* – IIci, LCIII or better, 4Mb of RAM, System 7 or later, 13-inch colour monitor, CD-ROM drive, speakers.
Bird's Life – IIci, LCIII or better, 4Mb of RAM (6Mb preferred), System 6.0.7 or later, 13-inch colour monitor, CD-ROM drive, speakers.
Contact: CentreGold Multimedia on 0121 625 3366.

MACFORMAT RATING 87%

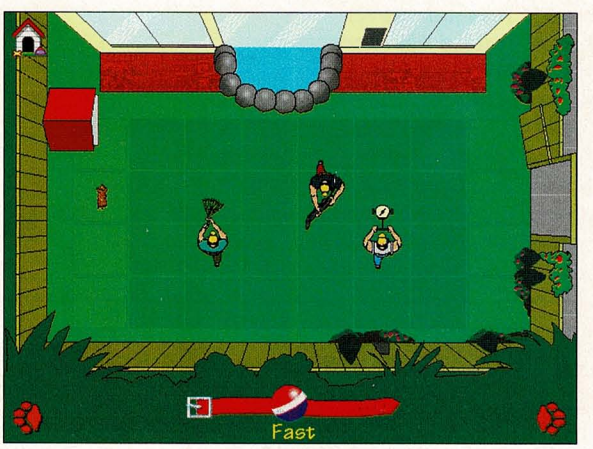


Their house has burnt down, so Shelley's and Dan's pet birds head off to the Amazon rain forest – your kids can join them.

She might be a movie star, but Ms Duvall still finds time to do the weeding.

At last the birds reached Los Angeles. They were still being tracked from the ground, but no one seemed to mind. George was the first to spot the hillside where they used to live. It was still quite far away, but he became very excited nonetheless.

A happy ending to *It's a Bird's Life*. Aah.



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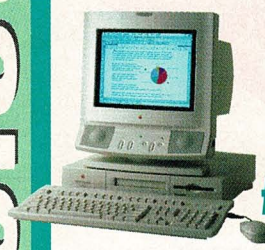

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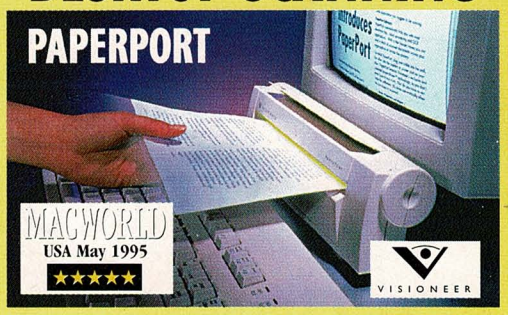

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The Cat Came Back Sitting on the Farm

The latest educational multimedia releases focus on the National Curriculum – but are the stories strong enough to keep your kids entertained too?

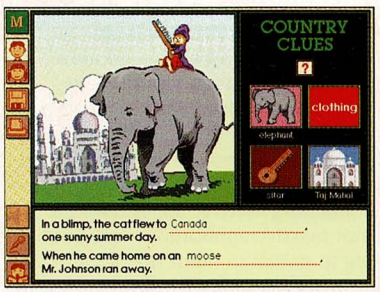
Adorning both of these releases is the trademark: 'Created by teachers and tested by kids.' It's an important detail to note. Christmas has put Macs into more than a few households, and the rush is on to be the lucrative software that follows these new purchases. Companies seeking to get ahead of the field have considered the latest educational worries of anxious parents and focused their efforts on products relevant to the National Curriculum.

Aimed at the five to nine year old age range, *Sitting on the Farm* and *The Cat Came Back* graft educational content onto standard children's software. Indeed, the packaging proudly boasts the product's Educational Summary. Reading, science and language are just three of the seven curriculum areas covered by each CD, but how successful are these titles in putting this information across to their wide-ranging target audience?

The Cat Came Back

The Cat Came Back features the globe-spanning adventures of a feline depicted as 'one cool cat'. Sunglasses and a leather jacket are the fashion as our furry friend – drawn in children's storybook style – embarks on voyages to Peru, the Arctic and even outer space. Whether you choose the option of listening to an adult storyteller, or instead have a reading partner 'sat' beside you (both boy's and girl's voices are included), the storybook pages are in-depth and fun to explore.

Moving the cursor around the picture, you can call up either a balloon or magnifying glass icon, revealing vocabulary or hidden animations.



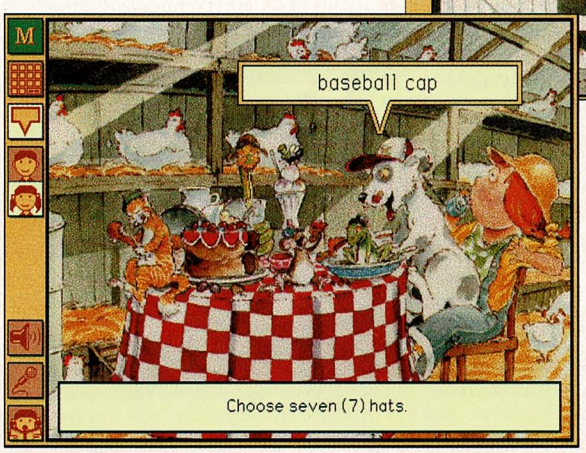
Of course, those details are wrong. The correct answers are *Cheltenham* and *narwhal.*

More enjoyable for the inquisitive mind is locating the hidden birds that appear on every screen. Each reveals a surprise animation, and it's a shame this degree of random gameplay couldn't have been utilised further. Long after the story's been read and reread, finding the bird and being presented with an ever-changing array of facts could have added much-needed longevity to the package.

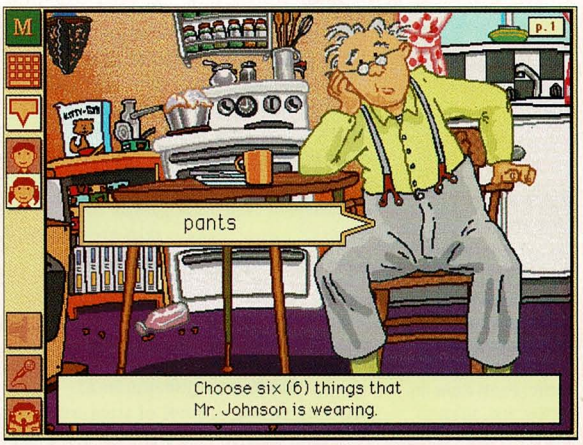
Sitting on the Farm

In a similar style, *Sitting on the Farm* comprises 12 pages, with associated animations. The story is based around farmyard tea-parties, and the variety of animals, both wild and domestic, that you could expect to bump in to.

The squirrel's out of here. Looking at the size of that grizzly, wouldn't you be out of there too?



Click around the screen to find all manner of strange headgear.



National Curriculum or not, anglicisation isn't among *The Cat Came Back's* strong points.

The Write Along and Sing Along options offered by both programs make them stand out from the range of similarly priced packages. Write Along places either the original pictures or new scenarios taken from the CD at the top of the screen, and your child makes up stories to fit the illustration. Different options develop reading and writing abilities. Sing Along is equally in-depth. You can listen to vocal or instrumental versions of songs, then break them into single bars with musical annotation. It's a touch sophisticated for the younger musician, but the Record facility enables them to wail away to their hearts' content. Sing Along will last and last – an observation that can be confidently applied to both these releases. **MIKE GOLDSMITH**

THE CAT/ ON THE FARM

Price: £19.99 each. **Out:** now.
Age range: five to nine.
Requires: Mac II or better, 4Mb of RAM, System 6.0.7 or later, 256 colour, 12-inch colour monitor, CD-ROM drive, speakers.
Contact: CentreGold Multimedia on 0121 625 3366.

MACFORMAT RATING 87%

MORE

There are three other titles available for Mac in the Kids Learn range: *Maths Ace Junior, The Selfish Giant* and *Wordstuff.* All of these conform to the requirements of the National Curriculum. For more details phone Sanctuary Woods/ CentreGold on 0121 625 3366.

ONCE UPON A TIME

If you like the idea of creative writing on the Mac for your kids, check out *Storybook Weaver Deluxe* from Iona Software, which scored 83% when it was reviewed in MACFORMAT 34. Call Iona on 0181 296 9454 for more information.

Prepare for a feast of shareware. Allow the magazine that knows its onions to filter out the tripe for you. Rod Lawton flips his burgers.

All the shareware featured here and more is on our covermounted CD-ROM

Once again we take a ride on the shareware rollercoaster. Sometimes we're creaking up to the top of the ride, with programs like *Verttice 2*. Other times we're plummeting to the depths, with *Astrology C*L*O*C*K*. Then, occasionally, we head off into the surreal, with programs like *Haunted House*. Take a trip around this issue's shareware fun park.

Action Dome 1.0

GAME

Shareware, registration fee $5

Imagine eating a bowl of sugared worms. The bad news is, that's what you have to do to get to the next level in *Action Dome*. The good news is, the keyboard controls make this difficult. *Action Dome* escalates in difficulty – you get 20 levels in the unregistered version. Each is a single screen full of bowls of sugared worms, which you eat by walking into; unpleasant monsters, which you avoid by not walking into; bonuses; and more unpleasant monsters that pursue you relentlessly.

The size and variety of monsters and bonuses, combined with the fast action and semi-intelligent wandering of the baddies, result in a game that's reminiscent of that old classic *Crystal Quest*, only it's a poor relation. The keyboard control gets easier with practice, but is it worth the effort?

OmegaWindow 1.6

UTILITY

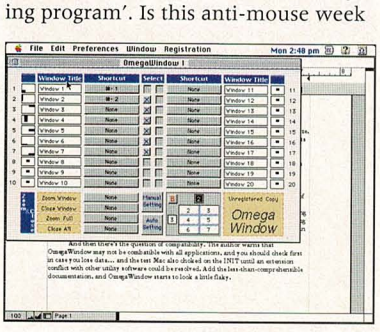
Shareware, registration fee $20

OmegaWindow is a 'mouse-free window manipulating and application managing program'. Is this anti-mouse week or something? Are they really that bad? *OmegaWindow* does two things. As a Desktop window manager, it enables you to resize, zoom, move, close, restack and swap windows. It's also an application manager, enabling you to switch between running applications, hide all windows containing inactive applications, and quit inactive applications without having to switch to them first.

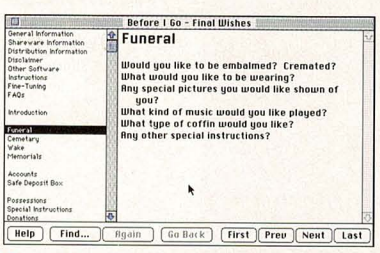
Using the *OmegaWindow* Setup application you can configure up to 20 windows to appear at a specific place on your screen, and at a specific size (assuming they are resizeable windows). You can also assign a shortcut that sizes and moves the active window to your specifications. And you can set up multiple windows simultaneously – handy if you're one of these people who have to has their windows tiled perfectly. (Our Deputy Art Editor won't go on holiday for fear of his windows being resized or moved.)

Being able to quit applications without making them active is handy, but the options for switching quickly between two running applications, listing all running applications and other functions aren't much easier than using the Mac's standard **Applications** menu.

Then there's the question of compatibility. The author warns that *OmegaWindow* may not be compatible with all applications, and that you should check first in case you lose data. The test Mac also choked on the INIT until an Extension conflict with other utility software could be resolved. Add less-than-comprehensible documentation, and *OmegaWindow* starts to look a little dubious. Being able to resize and relocate windows with a single keystroke is handy, but not that handy. Oh, and the demo version is disabled after 30 days...



Don't be put off by *OmegaWindow's* formidable setup screen. You can use it to set up useful shortcuts for automatically sizing and positioning windows. A handy 'mouse-free' tool.



If you think you're likely to die soon, you really ought to make a note of your final wishes. Great if you're already feeling miserable about things.

Before I go – Final Wishes

APPLICATION

Shareware, registration fee $5

This is very strange, and practically anything it's possible to say about it will be in bad taste. This is a kind of pre-prepared notebook, where you list all the things you want to happen, and all the things people will need to know, upon your demise. What do you want to wear at your funeral? Do you want to leave messages for specific people? Where is the key to your safety deposit box?

It's slightly bizarre and macabre – but if you want to be brought down to earth with a bump, just ask any solicitor about preparing for your own death, and they'll suggest a list just like this one. It's not the biggest laugh you've ever had (although some of the questions come close), but it does make good sense.

To change the subject, the application it's created with *(Notebook Maker 1.3)* is quite interesting. In a scrolling window down the left-hand side you can click on a heading to bring up the related text in the window on the right. It's fast, easy to understand and doesn't use much RAM. Now excuse me while I go and compile the guest list for my funeral.

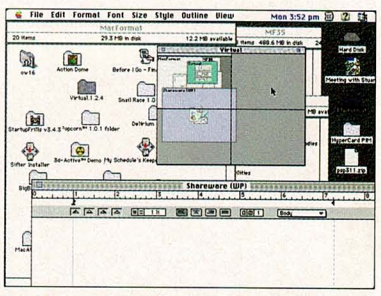
Virtual 1.2.4

UTILITY

Shareware, registration fee $10

UNIX users are used to being able to have multiple 'virtual' monitors (well, something has to make up for being a UNIX user). This means that they can switch between a number of virtual monitors, each with its own open windows and applications – or whatever the UNIX equivalents are.

Now you can do the same on your Macintosh, thanks to Pierre-Luc Paour's *Virtual*, a System Extension with accompanying application. The *Virtual* application enables you to create up to 25 virtual monitors, which

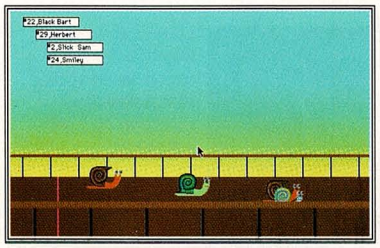


One of four 'virtual' monitors we have running under *Virtual*. You can even spread windows across more than one screen. Fascinating. Ingenious. Now all you have to do is work out is what on Earth you're going to use it for...

EXTENSION TENSIONS

The last thing most Macs need is more System Extensions. The machine used for these reviews displays 42 Extension and Control Panel icons on startup, and, although this is perhaps a little unusual, the typical number on most Macs isn't much less frightening. Extensions eat up RAM and slow down startup. What's worse, they often conflict – fight for the same resources – and then you've got trouble. Commercial Extensions are usually reliable, but those found in the shareware scene are less so.

Keep track of what Extensions you install on your Mac and under what circumstances trouble occurs, and you should be able to spot any problem Extensions quickly. If you don't, you might need a commercial utility like *Conflict Catcher 3*, and an hour or two of spare time, to sort the problem out...



Under absolutely no circumstances could you possibly imagine that snail-racing might be fun – but with *Snail Race 1.0* it really is! Aahh-extraordinary. Place your bets please…

are displayed on a floating palette. You can then easily switch from one 'monitor' to another, and move windows from one monitor to another, using this palette. An accompanying Extension, Virtual Dog, enables you to assign applications to specific monitors.

It's surprisingly useful to have several different Desktops running at once, particularly if you have a small monitor. And if you're working on a large DTP page or bitmap image, you can spread it over all the available 'monitors' – clicking from one monitor to the next is much quicker than scrolling through the document. Another neat feature of *Virtual* is that switching to a different 'monitor' automatically activates the application that was running when you left it – this alone makes it a worthwhile substitute for the **Applications** menu. Why not have all your Finder windows open in one virtual monitor, all your *ClarisWorks* documents in another, and so forth?

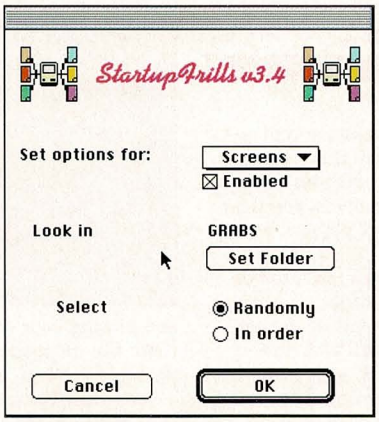
There are one or two tiny problems, though. There's a bug in the System software that makes hidden windows completely disappear as far as *Virtual* is concerned (when you select **Hide Others** from the **Applications** menu). There is a menu command to bring them back, though, and the author is working on a fix. If *Virtual* was tidied up and a few little glitches ironed out, it would be excellent. Otherwise, it's still a fascinating but flaky tool, which could be a godsend for those who get to grips with it.

Snail Race 1.0

GAME

Shareware, registration fee $5

COME ON, JIMMY! COME ON, YOU… YOU… OOH, YOU LITTLE… Mercifully, *Snail Race* drops out with a



Brighten up those tedious moments you spend watching your Mac start up, by getting it to display random images, using *Startup Frills*. More interesting than making a cup of tea, but less interesting than looking out of the window.

Type 1 error, saving Jimmy the snail from further abuse. No, but really – he was two to one on favourite, and I had $50 riding on him!

It might sound like the most stupid application you could imagine, but *Snail Race* grips you like a rabid gastropod and won't let you go. As one of four players, you have $500 to spend on a day at the (snail) races, and four contenders in each race to bet on. You've got the odds, you've got the cash – now all you need is a racing brain. Damn.

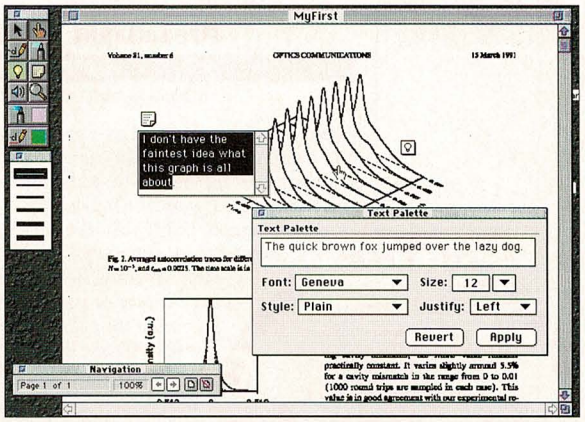
This isn't just cerebral entertainment, though. Once you've all placed your bets, the racing begins – and you can only sit and watch as the four snails slug it out over the course. First one gets ahead, then another. One slows down, another speeds up… the excitement is unbearable… and… and… Slimey Sam comes in last. What a git. And then another Type 1 error. $500 down the drain, a pocket full of useless betting slips, and only barely enough dough left for the cab ride to the liquor store. You could really get into this stuff.

Startup Frills 3.4

UTILITY

Freeware

Are you bored with the same old start-up screen? Do you wish your Mac would surprise you, just once? With *Startup Frills 3.4* in your Startup Items folder, it can. *Startup Frills*, for a



You can use *Sifter* for tasks similar to those performed by *Adobe Acrobat*, but its polished interface lacks *Acrobat's* speed and versatility of use.

change, doesn't install any Extensions or Control Panels. It's simply an application that quits when it's finished and shouldn't conflict with anything. You can use it to display PICT graphics or QuickTime movies, or play sounds or speech. And it will do something new, picked at random, each time you turn on your Mac.

It certainly brightens up the day. The only problem is that there are no sounds, movies or PICT files supplied, so you're stuck with the meagre selection you've already got. I chose the folder with all the pictures that accompany this shareware section. Sometimes I worry about my life.

Sifter 1.0

APPLICATION

Shareware, registration fee $49.95

Sifter enables you to import images, then underline or highlight text, add pop-up text fields to annotate specific items, and add database entries to quickly find specific information.

The shareware version is limited to three pages, but it's otherwise fully enabled, so you'll be able to judge whether you want the full version – and if you have *Adobe Acrobat*, you probably won't. *Sifter* has many of the same editing tools, plus some very polished and professional-looking palettes and interface widgets, but its glacial slowness, even on a PowerMac (the author recommends running it in 8-bit colour), is a worry.

It's a nice idea for technical types who need to swap information, but *Acrobat* does it better, can include 'live' text and can convert any document from any application into a file that the *Acrobat* 'reader' can open. Added

CONFUSED ABOUT SHAREWARE?

■ **Shareware** is a form of 'try before you buy' software selling and it's a great idea so long as you're honest. When you get some shareware, the documentation file that accompanies it will tell you how much it costs – typically it's somewhere between US$5 and $40 – and where to send your money. If you like the software and decide to keep it, then you're morally obliged to cough up. Not only do you get the satisfaction of boasting to friends about how honest you are, but the author will often give you something in return for registering, like a printed manual, or updates when released. The most common problem is sending money abroad, but as many shareware authors now accept credit cards, it's getting easier.

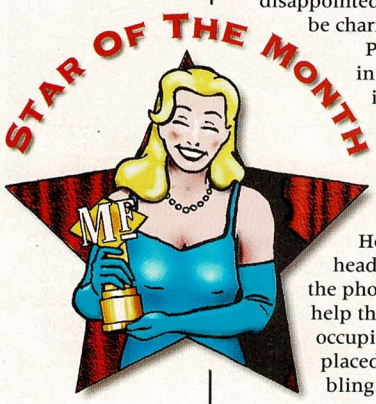
■ **Freeware** means that you don't have to pay for it at all. There are many derivations, such as postcardware, which means you have to send a pretty postcard to the author.

■ **Public Domain** (PD) is different from freeware because although you don't pay for freeware, the author keeps copyright and you have to follow his terms and conditions to use the program. This often means keeping all the files together, and not using or selling them for profit.

DreamLight Verttice 2

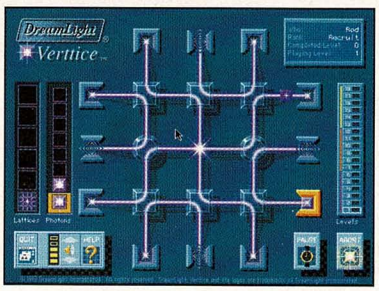
GAME

Shareware, registration fee $24.95



Verttice 2 looks fantastic, has a great soundtrack, and plays like a dream. It's more of a brain-teaser than the average shareware arcade game – it demands that you both move and think fast. If you like hairy, bug-eyed aliens, you'll be disappointed, but if you like sub-atomic physics, you'll be charmed. (Physicists joke.)

Photons come belting out of a reactor node in the centre of your crystal lattice, and can go in one of four directions to follow the network of laser beams (which look suspiciously like pipes) until, with luck, they pop into an empty power node. You help them do this by jiggling with the 'Vert' nodes that the laser beams pass through. However, working out where the photons are heading, which Vert node to rotate, and where the photons will then head, is not easy. It doesn't help that sending a photon into an already-occupied power node causes all the previously placed photons to come out again and start bimbling round the lattice, reducing the chances of you placing your quota of eight photons. There's no time limit, but the longer photons remain unplaced, the more unstable they get, until finally they blow up.



Level 18 of *Verttice* is easy if you've got 37 fingers and an ability to stop time at will. Otherwise, it's really quite tricky.

Warp and Bumper nodes add to the complications (don't ask), while AutoVerts and InvisoVerts appear in later levels to really muck things up. With 18 levels to complete, each tougher than the last, this is a fair old game. Unusually, *Verttice* wasn't programmed in ultra-fast machine code, but in *MacroMedia Director*, using its in-built programming language. And although there is a shareware fee attached, *Verttice* was only intended as a demo for DreamLight, a company specialising in multimedia productions. Now leave me alone – I'm going to get to level 11 if it kills me.

to this, you can also swap *Acrobat* files between the Mac and the PC – not a feature of *Sifter*.

My Schedule's Keeper 1.0

APPLICATION

Shareware, registration fee $10

On the face of it, the Mac is the perfect tool for storing names, addresses, appointments, to-do's and notes, and then cross-referencing the lot with a reminder system that organises your life completely. But you can't take your Mac on the bus, stick it in your jacket pocket, or write on it with a ballpoint pen when you get a sudden flash of inspiration (or cold sweat).

So a Mac-based PIM (Personal Information Manager) has to be something special if it's to be preferable to a notebook, diary or beer mat. *My Schedule's Keeper*, although it looks proficient, isn't special enough – sadly.

It's easy to call up your appointments for specific days, and each day has a to-do list with items you can tick to show they're completed. You have to fill in time slots via a dialogue box, though, rather than typing directly in to the display. You can't drag and drop appointments from one place to another, and you can't link to-do's in with appointments.

The biggest omission (which the author plans to fix in a future edition, along with drag and drop) is an address book. But even with one, this isn't slick enough to beat a paper-based pocket organiser.

Exile II 1.0.1

GAME

Shareware, registration fee $25

You see plenty of arcade games in the shareware market, but role-playing games are less common. This one looks good. The plot doesn't hold too many unexpected twists – exiled underground evil dictator, mages and swords, talking, fighting, changing weapons, controlling your party, that sort of thing – but that won't matter to dedicated sword and sorcery buffs.

The game area is big, and the game task pretty sizeable too. Throw in all the variables – who to have in your party and what to equip them with – and you can look forward to many nights spent hunched over a monitor, cackling and cursing. It also looks good. Well, mostly. The characters are well-drawn, but don't exhibit any animation. There's a nice control palette, and, although the scenery is basic, it is clear and detailed.

Of course, the game itself might eventually turn out to be incredibly tedious and difficult to complete – but you'll have to play it for a while to find out. On first impressions, though, it looks like a game that any role playing fan ought to examine.

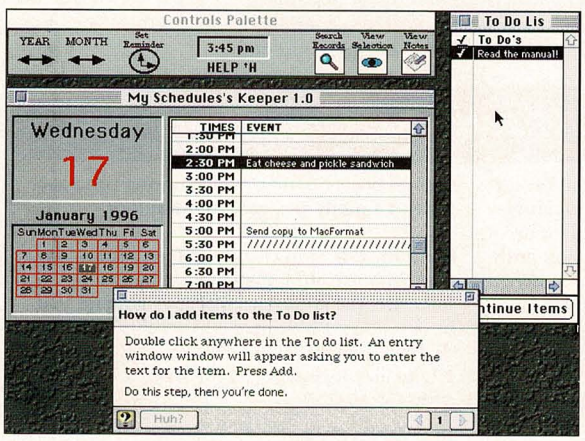
Haunted House 1.0.2

GAME

Shareware, registration fee $5

Remember *Cosmic Osmo?* It was a late '80s *HyperCard* stack, in which you wandered round a bizarre planetoid (with some dubious topological inconsistencies), clicking on objects and creatures to launch animations, sounds or other amusing events. It was actually rather good – and so is *Haunted House*.

Aimed at kids over seven, *Haunted House* is much the same sort of thing. You enter a little haunted house and explore the objects inside, clicking on them to see what happens. There's a sofa that turns into a monster, robots that speak your name, a monster-building kit, and more. It's all in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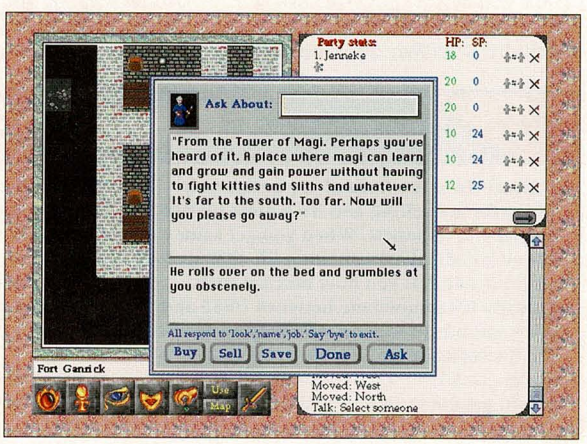
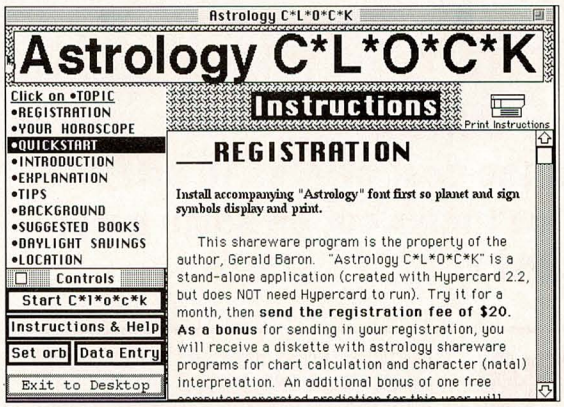
How do I add items to the To Do list?
Double click anywhere in the To do list. An entry window window will appear asking you to enter the text for the item. Press Add.
Do this step, then you're done.
Huh?

It's hard to design a Mac-based Personal Organiser that is more efficient than a pocket diary. *My Schedule's Keeper* isn't (and it requires 2Mb of flipping RAM).


Party stats:
HP: SP:
1. Jenneke
Ask About:
"From the Tower of Magi. Perhaps you've heard of it. A place where magi can learn and grow and gain power without having to fight kitties and Sliths and whatever. It's far to the south. Too far. Now will you please go away?"
He rolls over on the bed and grumbles at you obscenely.
All respond to 'look','name','job.' Say 'bye' to exit.
Buy
Sell
Save
Done
Ask
Fort Ganrick
Moved: West
Moved: North
Talk: Select someone

Exile II enables you to have interesting conversations with the people you meet... who just happen to be rather surly and abrupt. Really! Just because the very fabric of civilisation is threatened, that's no excuse for rudeness.


Astrology C*L*O*C*K
Astrology C*L*O*C*K
Instructions
Print Instructions
Click on •TOPIC
•REGISTRATION
•YOUR HOROSCOPE
•QUICKSTART
•INTRODUCTION
•EXPLANATION
•TIPS
•BACKGROUND
•SUGGESTED BOOKS
•DAYLIGHT SAVINGS
•LOCATION
Controls
Start C*l*o*c*k
Instructions & Help
Set orb
Data Entry
Exit to Desktop
___REGISTRATION
Install accompanying "Astrology" font first so planet and sign symbols display and print.
This shareware program is the property of the author, Gerald Baron. "Astrology C*L*O*C*K" is a stand-alone application (created with Hypercard 2.2, but does NOT need Hypercard to run). Try it for a month, then send the registration fee of $20. As a bonus for sending in your registration, you will receive a diskette with astrology shareware programs for chart calculation and character (natal) interpretation. An additional bonus of one free

If you believe the planets control your fate, and you enjoy watching black-and-white icons creaking their way around a *HyperCard* stack, *Astrology C*L*O*C*K* is the program for you. Come back, Mystic Meg…

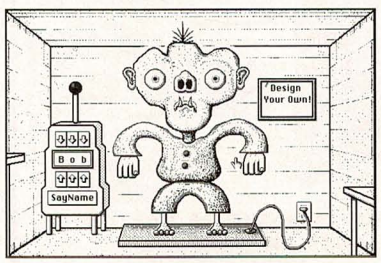
Astrology C*L*O*C*K

APPLICATION

Shareware, registration fee $20

If you attach enough importance to astrology, you might be prepared to overlook the fact that this is a *HyperCard* stack, put together in glorious mono, with zero design finesse. It keeps track of the position of all the planets (after you've set your time zone), updating every few minutes. It tips you off when something significant is happening, and tells you what you should be watching out for or doing. It's much more interesting, though, to take a look at the price list the author pops into the instructions. *How* much? I'm in the wrong job! (You didn't have to agree, Ed.)

Take a look at this if you want to pick up a few *HyperCard* scripting tips, or maybe if you think the planets can help determine your future. Avoid it if you're prone to migraine.



Haunted House will give small children hours of pleasure. They can design effigies of their parents or guardians, and program them to speak.

mono, except for a green head that materialises in a bottle in the lab, but it's so well-designed that the lack of colour graphics doesn't look bad at all. There's some clever use of *HyperCard* fades and dissolves, and lots of attached sounds.

The only problem is its size – or lack of it. There's a front view of the house, a living room, a laboratory and a view of the graveyard outside. What there is, however, is good, and well worth checking out. Small though *Haunted House* is, the shareware fee is even smaller, making it good value. You might even get the opportunity to scare your kids with it.

MacAttack 1.8.1

GAME

Shareware, registration fee $15

Don't play this game if you don't like spiders. There are lots of large, red spiders hanging around, pouncing on you when you least expect it. They hatch out of eggs, which come rolling down the screen towards you. Yuck. It's not just eggs you have to face – there are grotesque, ball-shaped creatures with sharp teeth, apparently indestructible rolling mines, and many other varieties of lethal baddie.

All these nasties come at you out of a pseudo-3D landscape (it is in fact 2D, but with strong perspective – a reasonably convincing effect). It's standard arcade fare – you have to clear all the creatures in a level before you can move on to the next. You also get levels where there is a single, extremely tough, monster to beat. You kill them by shooting them 1,394 times, while dodging the hail of missiles and bullets they fire at you. Ho hum.

Still, *MacAttack* is nicely drawn, and it runs at a cracking pace. The demo only has three levels, while the full release offers 30, with five difficulty levels to choose from, just in case you finish it too soon. It wouldn't challenge the cerebellum of a gnat, but it's a good mindless blast if you're tired of having to think about things.

Fonts Manager 1.1.1

UTILITY

Shareware, registration fee $10

Fonts are almost as bad as Extensions for gobbling up System memory and slowing down startup. But while System 7.5 owners have Extensions Manager for keeping 'sets' of Extensions for specific purposes, there's no equivalent built-in application for handling all the fonts that gradually accumulate in your System Folder. *Fonts Manager* aims to get round that by first assembling a list of all the fonts you have installed, then enabling you to save them in sets. Good idea.

The interface looks reasonable, and it's easy enough to work out what's going on. Although it looks like a Control Panel, *Fonts Manager* runs as a separate application – it's not initialised on startup. No Extensions conflicts to worry about there, then.

What is worrying is the sheer length of time it takes to change sets. This may be because it's all based around AppleScript, which isn't always fantastically rapid. Then there's the fact that you have to restart afterwards. You might as well use a commercial utility like *Conflict Catcher 3*, which, as well as resolving Extension conflicts, also enables you to create sets of Control Panels, fonts and startup items. **MF**

Fed up with spending precious seconds shifting your fonts around? Well, now it can take minutes, thanks to *Font Manager*.

WHERE TO FIND THEM

We often get calls from readers who want to know how to get hold of the shareware reviewed in these pages. Well, here are some of the best methods:

1. Buy the CD-ROM edition of MACFORMAT. All the shareware we review in each issue is on the CD in a separate folder. There's also loads of other shareware on the CD every issue, conveniently sorted into categories.

2. Write to a shareware dealer; they occasionally advertise in the back of MACFORMAT. The dealer should have the program you're looking for, especially if he subscribes to our CD-ROM edition.

3. Use the Internet, if you have access. One of the best sources around is Imperial College at **src.doc.ic.ac.uk**. Use ftp to connect (login: anonymous; password: your e-mail address) and cd to **computing/systems/mac**. We use the umich directory, but sumex is fine as well.

4. Local user groups often have libraries of shareware. Take a look at our Reader Ads section (page 130) to see if there's one near you.

Wherever you get your shareware, beware of viruses. *Disinfectant 3.6* is the best and cheapest way of staying safe – it's on the Cover CD.

MACFORMAT OFFERS

MACFORMAT offers you the best Mac products at the best prices. All prices include VAT and delivery – no hidden extras! Don't miss out on some great deals – order now by mail or phone 01225 822511.

COLOR-IT!™

Version 3.0.4

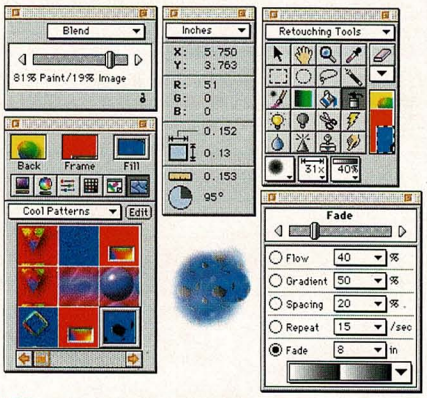
The latest version – exclusive

We gave away *Color It! 2.3.5* on MACFORMAT 31's Cover CD-ROM and floppy disk (if you missed it, see over the page to order your copy). Now we bring you the exclusive chance to buy the NEW *Color It! 3.0.4*, to give you image editing features that are on a par with those of the mighty industry standard, *Photoshop*. This latest version of *Color It!* offers a range of new, powerful features, including:

- Fully-native PowerPC version
- CMYK four-colour separation
- RGB channel editing
- Extrude and drop shadow filters
- User-defined Undo levels (up to 16)
- Levels and Curves filters
- Unsharp Masking filters
- Bezier Brush tool
- Kernel Brush tool
- Crop tool
- Live filter previews
- Palettes combined to save screen space

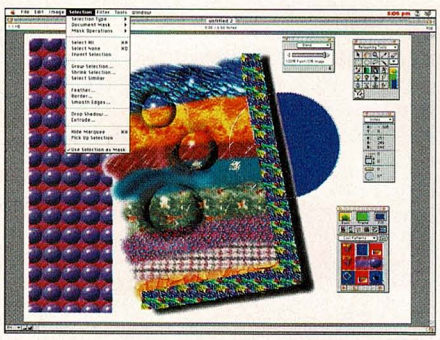
... and much more.

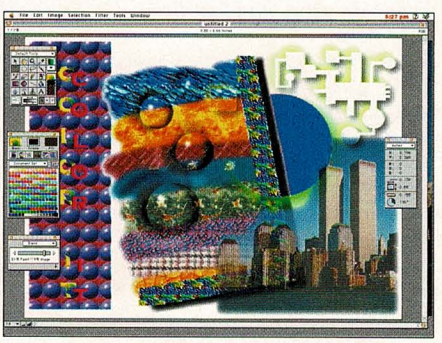
Color It! has come a long way – version 3.0.2 rated a storming 88% in MACFORMAT 28. So don't miss out on this opportunity. This up-to-date version is available nowhere else in the United Kingdom, and *Color It! 3.0.4* is available from MACFORMAT for a limited period only. It can be yours for only £49.95, inclusive of delivery and VAT.



If *Photoshop* is beyond your budget, then the latest version of *Color It!* is a serious alternative.

Price: £49.95
Order code: MCFCT3





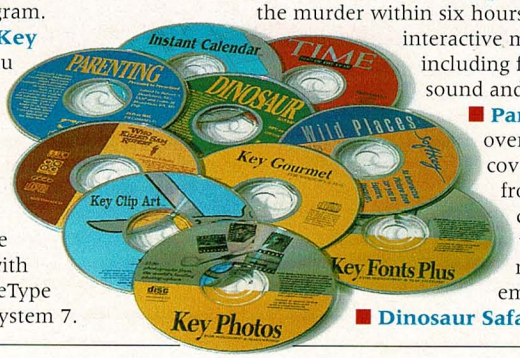
SoftKey Ten CD Pack – ten CDs for only £29.95!

Fonts, clip art, games, edutainment, and more

■ **Key Home Gourmet.** A sophisticated and powerful cooking program.

■ **Key Clip Art and Key Photos.** These give you a library of 5,000 quality TIFF images to copy into your own documents.

■ **Key Fonts Plus.** 303 fonts to enhance your documents. These fonts are compatible with the PostScript and TrueType format supported by System 7.



■ **Who Killed Sam Rupert?** Can you solve the murder within six hours? This game uses interactive multimedia, including full motion video, sound and animation.

■ **Parenting.** Includes over 400 images covering everything from fertility to childbirth! Features a complete medical guide and emergency section.

■ **Dinosaur Safari.** Find out all about dinosaurs, geography, flora, fauna and geology. It's an interactive learning game that the kids are bound to love.

■ **Instant Calendar.** Use *Instant Calendar* to keep track of meetings, appointments, birthdays and other events.

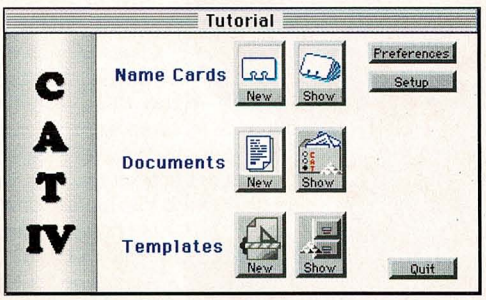
■ **Wild Places.** 100 scenes of beautiful North American landscapes accompanied by original audio clips.

■ **TIME: Man of the Year.** Some of the most influential people of the 20th century.

SoftKey Ten CD Pack
Price: £29.95
Order code: MCF10C

C•A•T 4

MACFORMAT EXCLUSIVE OFFER



Save £33 off the normal selling price!

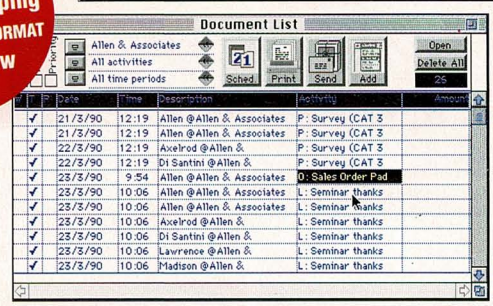
C•A•T 4 rated a whopping 81% in MACFORMAT 32's review

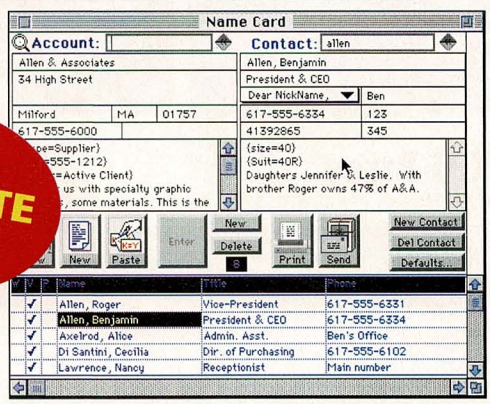
C•A•T 4 is an off-the-shelf relational database offering word processor, DTP and spreadsheet functionality – it's the ultimate contact manager for your company, and can be tailored to meet your specific needs. It can even create documents linked to its built-in time management feature.

C•A•T 4 offers seriously impressive filing and retrieving abilities. All the documents (letters, invoices, call logs, etc) that you create are filed automatically by time and date, to each contact you communicate with. This enables you to review, at any time, a full history or single item of correspondence with any company or individual. Anyone with professional, business, or personal requirements can benefit significantly from *C•A•T's* ability to display all your communications quickly and easily, whether written, spoken or faxed.

Because the software is so versatile, a customised solution can be developed cost effectively to suit any business, no matter how large or small. All it requires is the production of document templates specific to the job function. Examples of what it can successfully manage include:

- Sales & marketing tracking
- Architecture project management
- Time and job costing recording
- BS5750 administration control
- Designer job bag system


Document List
Allen & Associates
All activities
All time periods
Sched
Print
Send
Add
Open
Delete All
Date
Time
Description
Activity
Amount
21/3/90 12:19 Allen @Allen & Associates P: Survey (CAT 3
22/3/90 12:19 Axelrod @Allen & P: Survey (CAT 3
22/3/90 12:19 Di Santini @Allen & P: Survey (CAT 3
23/3/90 9:54 Allen @Allen & Associates O: Sales Order Pad
23/3/90 10:06 Allen @Allen & Associates L: Seminar thanks
23/3/90 10:06 Axelrod @Allen & L: Seminar thanks
23/3/90 10:06 Di Santini @Allen & L: Seminar thanks
23/3/90 10:06 Lawrence @Allen & L: Seminar thanks
23/3/90 10:06 Madison @Allen & L: Seminar thanks



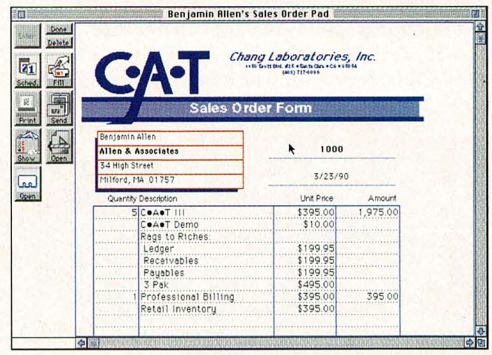
FREE TEMPLATE DESIGN

There's a 90-day fully functional version of *C•A•T 4* on MACFORMAT 32's Cover CD, so you can take a look for yourself to see just how powerful the software can be.

Free template design!

To ensure that you get started with *C•A•T 4* quickly and with a minimum of fuss, the makers of *C•A•T* are offering two hours of free template design for every new MACFORMAT buyer who purchases the full version. Simply fax over your template designs and they will be put together and returned on disk.

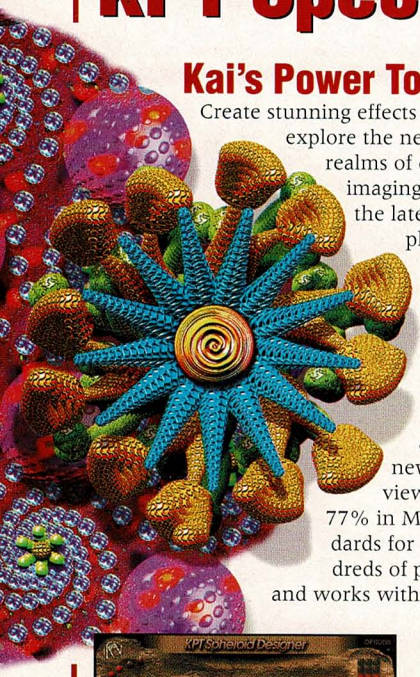
Once you have *C•A•T 4* installed, you will never again have an excuse for missing an appointment or deadline, leaving invoices long overdue, forgetting to make a follow-up call, or losing correspondence. With *C•A•T* organising your administration you'll see increased efficiency and profitability almost immediately. Take advantage of this special MACFORMAT offer and you can buy *C•A•T* for only £189 – a saving of more than £33 on the normal selling price. You'll also be able to make use of the *free* template design service to set *C•A•T* up to work the way you want.



C•A•T 4 **Order code: MCFCAT4** **Price: £189**

ALL PRICES INCLUDE VAT & DELIVERY – NO HIDDEN EXTRAS
ORDER NOW! CALL THE HOTLINE ON 01225 822511

KPT Special Offers



Kai's Power Tools 3

ONLY £95 plus VAT with 2 FREE CD-ROMs

Create stunning effects and explore the new realms of digital imaging with the latest set of plug-in compatible effects tools. *KPT 3* delivers rich and complex special effects, unmatched by any other filters or extensions available today. Transform your digital artwork with intense gradients, textures and lens effects, taking advantage of a new interface, new filters and bigger, faster previews. *KPT 3* scored an impressive 77% in MACFORMAT 33 and sets new standards for *Photoshop* plug-ins. With hundreds of preset textures, *KPT 3* is a must, and works with all plug-in-compliant software.

Kai's Power Tools 3
Price: £111.62
Order code: MCFKPT3

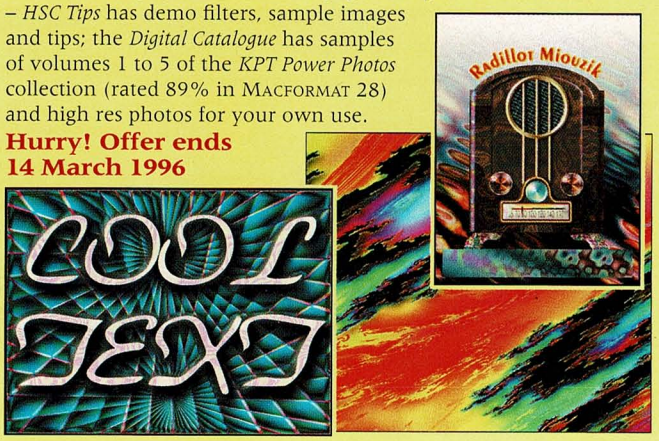
PLUS £5 Marks and Spencers voucher with the first 50 orders

2 FREE CD-ROMs

HSC Tips and Tricks and KPT Power Photos Digital Catalogue

Buy any KPT product from these pages and get two Kai Krause CDs – *HSC Tips* has demo filters, sample images and tips; the *Digital Catalogue* has samples of volumes 1 to 5 of the *KPT Power Photos* collection (rated 89% in MACFORMAT 28) and high res photos for your own use.

Hurry! Offer ends 14 March 1996



KPT Power Photos 2

ONLY £95 plus VAT with 2 FREE CD-ROMs

This excellent collection of high resolution photos features 375 images, across a total of five CDs. Each photo is provided in TIFF format, making it compatible with almost all software applications. At resolutions of 175 lpi, *KPT Power Photos 2* provides remarkable and interesting pictures, now with the benefit of new 'transflectance' channels. Suitable for all users, from home to professional.

KPT Power Photos 2 **Price: £111.62**
Order code: MCFKPP2

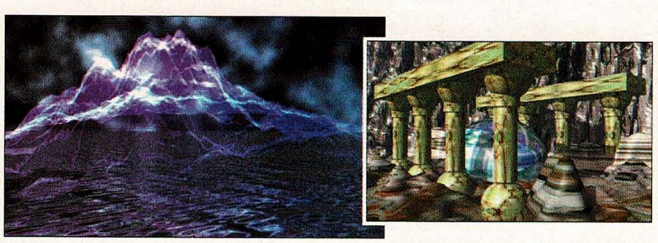
KPT Bryce

NOW ONLY £95 plus VAT with 2 FREE CD-ROMs

(MACFORMAT 20: 91%)
Produce incredible landscapes on your Mac using *KPT Bryce*. You have complete control over the shape and form of your terrain. Clouds obey your every mouse-click and a violent thunderstorm can be conjured up in seconds. Miraculously journey into outer space; visit unknown planets and their mysterious moons.

Once you've started to use this software you'll be unable to stop creating wonderful graphics – it's that compulsive. Reviewed in MACFORMAT 20, *KPT Bryce* scored an impressive 91%. *KPT Bryce* requires an LCII or better, 4Mb of free RAM, and System 7 or later.

KPT Bryce **Price: £111.62** **Order code: MFKPT**

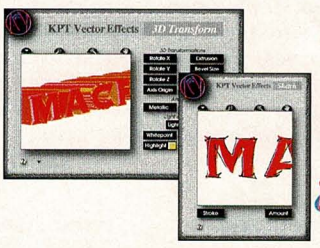


KPT Vector Effects

NOW ONLY £95 plus VAT with 2 FREE CD-ROMs

(MACFORMAT 29: 92%)
KPT Vector Effects does for *FreeHand* and *Illustrator* what *Kai's Power Tools* did for *Photoshop* – it adds a brilliant new dimension to both of these programs, enabling you to easily create stunning 3D effects. Using the innovative interface you can rotate, swivel, bend and alter the look of any object, including text, to whatever you want. You'll find a full review of *KPT Vector Effects* in MACFORMAT 29, where it scored 92%.

KPT Vector Effects **Price: £111.62**
Order code: MCFKVE



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MACFORMAT Back Issues Complete the set – only £5 each, including p&p.

ISSUE 23

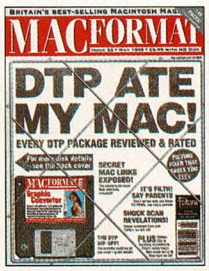
April 1995

■ **On the disk:** *Oh-no! More Lemmings; StuffIt Lite 3.5*

■ **On the CD-ROM:** comics collection; *PAWS; Sources of Faith; Marathon*

■ **Inside:** comics on the Mac – interviews, reviews and how-to's; *FreeHand* vs *Illustrator;* colour printers; reviews of *XRes* and the best Mac game ever – *Marathon*

Order codes:
CD-ROM MFCD23
HD Disk MFHD23



ISSUE 24

May 1995

■ **On the disk:** *Graphic Converter; MacCheckers!*

■ **On the CD-ROM:** demos of five top DTP programs, including *QuarkXPress* and *PageMaker,* plus *Photoshop 3.0* and *ClarisWorks 3.0*

■ **Inside:** every Mac DTP package reviewed and rated; colour scanners; networks explained; *PhotoFix* reviewed

Order codes:
CD-ROM MFCD24
HD Disk MFHD24

ISSUE 25

June 1995

■ **On the disk:** *Knot 1; MacSnails; Glypha 3, TypeIt4Me, Electric Poet* and MIDI files

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available.

■ **Inside:** all you need to know about PowerMacs, fax-modems tested; plus some 'Cosmic' CD-ROMs

Order codes:
HD Disk MFHD25

ISSUE 26

July 1995

■ **On the disk:** animation programs, *Disinfectant 3.6*

■ **On the CD-ROM:** demos of *ProMotion, Amazing Animation, Elastic Reality, Morph* and *Circus,* plus *3D Dinosaur Adventure.*

■ **Inside:** animation on the Mac; 15- and 17-inch monitors reviewed; comms made easy with *TeleFinder*

Order codes:
HD Disk MFHD26

ISSUE 27

August 1995

■ **On the disk:** *Anagrams, Word Breaker, Smart Calendar, Xearth* and *BattleTanks*

■ **On the CD-ROM:** sorry, the CD-ROM edition is no longer available

■ **Inside:** the complete guide to portable Macs; Internet basics series; plus portable printers reviewed.

Order codes:
HD Disk MFHD27

ISSUE 28

September 1995

■ **On the disk:** *Catch The Buzz, Lobster, DragThing.*

■ **On the CD-ROM:** *Color It!, Dark Forces, Circle Elements* and *WorldWrite* demos, plus over 75 high-res clip photos.

■ **Inside:** image editing; what those Extensions and Control Panels *do*; graphics tablets, PaperPort scanner and *Dark Forces* reviewed.

Order codes:
CD-ROM MFCD28
HD Disk MFHD28

ISSUE 29

October 1995

■ **On the disk:** clip art, games and utilities, fonts.

■ **On the CD-ROM:** clip art, 55 high res photos, Bomb Busters, *Discworld* demo.

■ **Inside:** eye-catching black-and-white DTP; clip art collections, *KPT Vector Effects,* language learning software and multimedia encyclopaedias reviewed.

Order codes:
CD-ROM MFCD29
HD Disk MFHD29

ISSUE 30

November 1995

■ **On the disk:** *MacPipes, MacQubic, Gossamer.*

■ **On the CD-ROM:** HTML authoring software, *QuickEditor,* QuickTime 2.1, *SmartSketch* demo.

■ **Inside:** publishing on the Net and CD-ROM, QuickTime utilities, *Alone in the Dark, SmartSketch,* input devices – alternatives to the mouse.

Order codes:
HD Disk MFHD30

ISSUE 31

December 1995
Double-disc special!

■ **On two disks:** *Color It! 2.3.5* – full version, *Factory*

■ **On two CD-ROMs:** *Color It! 2.3.5* plus fonts, clip art, and more. *Acrobat Reader.*

■ **Inside:** 50 ways to make your Mac run faster, *ClarisWorks 4, Doom 2, SoftWindows,* personal organisers, programming.

Order codes:
HD Disk MFHD31

ISSUE 32

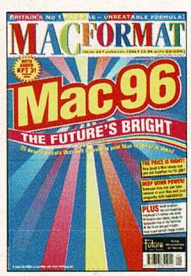
Christmas 1995

■ **On the disk:** *Pentominoes, Frog Xing, Xmas Lights, FindText 1.3,* utilities.

■ **On the CD-ROM:** *Marathon 2,* QuickTime VR, *C•A•T 4,* art software, multimedia.

■ **Inside:** create great art on your Mac, the new range of PowerMacs, *PageMaker 6,* kids' multimedia, *Wing Commander 3.*

Order codes:
HD Disk MFHD32



ISSUE 33

January 1996

■ **On the disk:** *Eclipse 3, Altair 2, Gravity Balls 1, TextBrowser 1.1, Aaron...*

■ **On the CD-ROM:** *Doom, Descent, Voodoo Lounge,* education demos and more.

■ **Inside:** what's happening on the Mac in 1996, *KPT 3, Day of the Tentacle, Aladdin, Session 2,* guide to buying a Mac setup.

Order codes:
CD-ROM MFCD33
HD Disk MFHD33

ISSUE 34

February 1996

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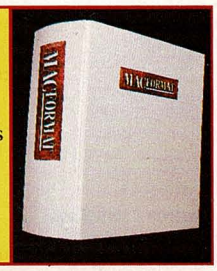

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Marathon 2

Somewhere in the heavens above... a sequel is waiting. *Marathon* was the coolest game of last year – does *Marathon 2* live up to it? Lindsay Bruce reckons so.

It seems that you can't just let a good game idea go; you have to produce a sequel. That's what Bungie Software, creator of *Marathon*, has done, and *Marathon 2* promises to be bigger and more violent than its first incarnation.

MACFORMAT Classic

In the original *Marathon*, you are a battle veteran who lands on the spaceship Marathon to find out that Durandal, one of the ship's artificial intelligences, has gone rampant and let a bunch of aliens – the Pfhor and the S'pht – take over the ship. You wipe out the Pfhor and regain control of the ship – end of game. Seventeen years later, in *Marathon 2*, you're once again surrounded by all your old adversaries, plus some new ones to boot. You have souped up weapons and a redesigned interface, and your mission is to explore the planet, find clues as to the whereabouts of the Eleventh Clan (a lost tribe of S'pht), and kill any Pfhor that get in the way.

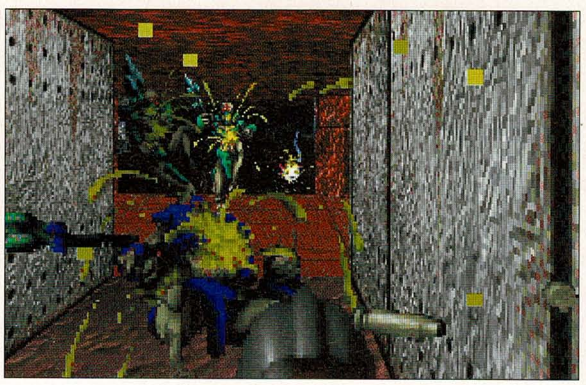
MORE CARNAGE

Marathon 2 comes with two serial numbers – one for the full game and one to install a network version on a second Mac. Invite a friend round for a walk on the wild side.

All very well, but...

So much for the plot. Like its predecessor, *Marathon 2* is a texture-mapped 3D shoot-'em-up. While you can run it from CD-ROM, ideally you should install it to your hard disk – taking up a monstrous 50Mb (compared with 20Mb for *Marathon*), but enabling it to run much faster.

Although the feel of the game is much the same, *Marathon 2* has some major improvements. The game screen has been redesigned to accommodate a larger viewing area, and all of the weapons look different. The game engine itself runs much faster, and new sound options have been added. Choose **Ambient sounds** from the **Sound** preferences, then turn on **Active panning**, and you can totally immerse yourself in exploring an ancient alien civilisation on a hostile planet... and shoot lots of things, of course. Even the music has seen serious upgrading. There's every chance that you'll play *Marathon 2* purely to listen to the title theme at least once – it's so horribly catchy.



Like its predecessor, *Marathon 2* has some magnificent splatter effects that are particularly satisfying when viewed *really* close up.

The game graphics are also much improved. Look out a window and you see an alien desert with strange rock formations and dark clouds. But all these sumptuous graphics scrolling rapidly around on your screen take their toll on your poor Mac, so it's just as well there are options for those who don't have the latest and greatest in Mac hardware. You can reduce or enlarge the game window, play in 256 or thousands of colours, and use high or low resolution graphics. The high res setting looks great, but is slow on a non-PowerMac. You may only want to use this with a reduced screen size.

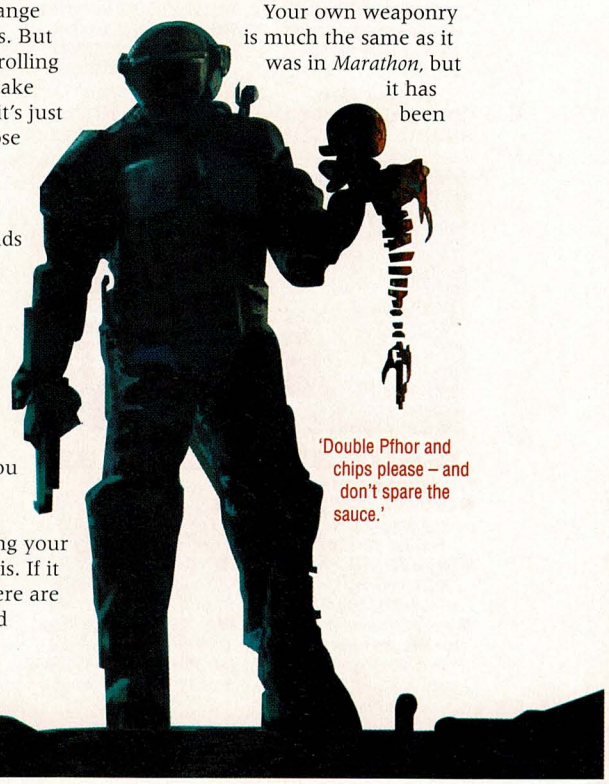
Marathon 2 has extensive options that you can use to customise the sound settings. You can play with 8-bit or 16-bit (CD-quality) sound effects, in either stereo or mono – providing your Mac's circuitry can cope with this. If it can't, the option isn't given. There are also options for additional sound effects, such as 'Ambient sounds' (wind noise, raging lava, and trickling water), and 'More sounds', which gives the Bobs (short for born-on-board, the hapless generation of crew born aboard the Marathon) more interesting and varied things to say. Active panning is provided for use in stereo mode, giving an effect similar to SurroundSound (TM).

You can also choose how many sounds *Marathon 2* can play at once – the more sounds you select, the more realistic the game. A volume control is also provided, which you can change during the game. However, unlike its predecessor, *Marathon 2* offers no background music to listen to during the game, but this really isn't a crushing blow – there's usually so much going on that you don't notice the lack of music.

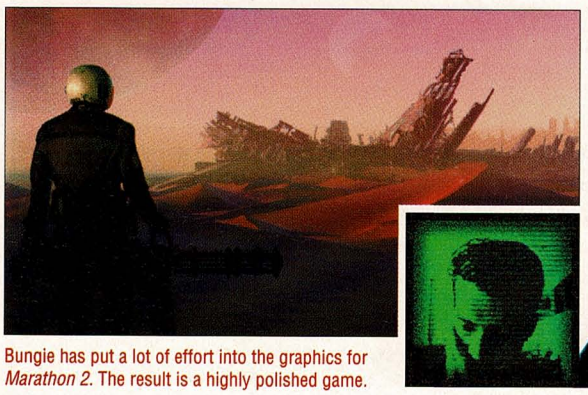
Watch out for...

On playing the first level you'll immediately notice the new, improved Bobs. In *Marathon* the Bobs just ran about a lot getting blown up or shot – usually when they got in your way. But in M2, the Bobs have teeth. Armed with pistols, they assist you in the task of wiping out the Pfhor for good. Shoot more than a couple of Bobs by accident, or just for old times' sake, and you'll be on the receiving end of some very accurate fire from their comrades.

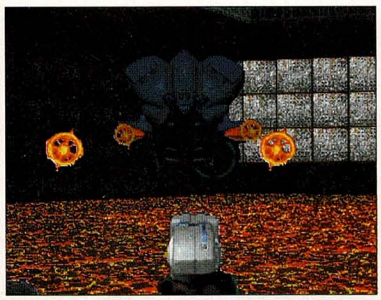
Your own weaponry is much the same as it was in *Marathon*, but it has been



'Double Pfhor and chips please – and don't spare the sauce.'



Bungie has put a lot of effort into the graphics for *Marathon 2*. The result is a highly polished game.



Hey you, your mother was a Volkswagen Passat! Now, where *did* I leave that rocket launcher?

Don't you just hate walking into a room full of Hunters only to realise you've got no grenades left? Er, so you'll just be leaving then, will you?

Marathon 2 offers some lovely scenery to admire, and lots of green slimy things with bad dentistry to shoot at. You can swim in that water, too.

It's Pfhor-hunting season again. Tally ho!

remodelled to look more realistic. You start with your (almost) bare fists and a .44 Magnum with a couple of ammo clips. As you progress through the game, you graduate to more destructive toys such as the combined machine gun/grenade launcher, the fusion pistol, the flame-thrower, the rocket launcher, and – a personal favourite for close encounters – the sawn-off shotgun. The shotgun is a new addition to the stable of *Marathon* weaponry, and a welcome one, especially as you can carry two at once.

And you'd better watch where you put your feet – otherwise you could find yourself drowning in a pool of water, choking on Pfhor slime, or burning up in a lake of lava. Be prepared for plenty of swimming.

The gameplay

What made *Marathon* so compelling was its mixture of adventure and action. However, as you may recall, some of *Marathon's* puzzles could drive you insane – remember the sheer frustration of the platform puzzle on the 'Colony Ship For Sale, Cheap' level? Not so in *Marathon 2*. Most of the puzzles are of the find-the-switch, blow-something-up, or repair-the-terminal variety – a combination that suits the game admirably.

Much of your time is spent exploring each level, and most of 'em are huge – a lot bigger and more adventurous than they were in *Marathon*. Durandal's guidance, if you can call it that, is vague at the best of times and non-existent on some levels, so you'll need to use your own intuition. This makes each level a real mental challenge, as if dealing with the Pfhor wasn't enough.

But what makes the game so gripping, especially on the harder difficulty settings, is the use of battle tactics. Rush in, guns blazing, in *Marathon 2* and you will meet with a swift demise. The Pfhor are an intelligent and dangerous species, as are their cyborg slaves, so you have to be fast on your feet, even faster on the trigger, and have an incredibly sharp mind.

This is in part what gives *Marathon 2* its incredible longevity. Even after you've completed the game once, there are still the harder difficulty settings, the network levels, plus all those almost-impossible-to-find secret bits...

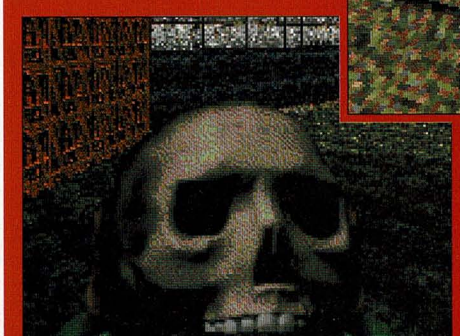
Very cool

There's certainly plenty in this game to keep you occupied for months. The graphics and sound are excellent, and the gameplay is addictive. The only irritating thing about *Marathon 2* is the fact that it needs a minimum of a 68040 processor to run on, which rules out nearly all Macs made more than two years ago. Even on a Performa 630, one of the faster 68LC040-based Macs, the game is decidedly sluggish when set to full screen display – you're really not seeing the game at its best unless you're playing it on a PowerMac. Another gripe is the price. We were quoted a retail price of £65 – heavy just for a game – so shop around for the best price. But when it comes down to it, *Marathon 2* is a cracking game, and richly deserves its MACFORMAT Classic award. **MF**

NETWORK CARNAGE

If you get bored with blasting aliens to hell, then you can always beat up a few of your workmates. *Marathon 2* can be played over a local network with up to eight players. You can go head to head as individuals, or work in teams, over 11 network levels. If you have plenty of spare time on your hands, you can even play the whole game co-operatively over a network, but you'll need to have a very understanding boss to try this option out. We did.

This was once Mark, our Art Editor and resident *Marathon* addict, but he met with an unfortunate accident involving a rocket launcher.



One of the network games involves holding onto this skull for as long as possible without dying. It's all good wholesome family entertainment.

MARATHON 2: DURANDAL

Price: £64.62. **Out:** now.
Requires: Performa 630, Quadra or PowerMac, 4Mb of free RAM, System 7 or later, 13-inch colour monitor, CD-ROM drive. If you don't have a double-speed CD-ROM drive or faster, you'll also need 50Mb of hard disk space to install the game into.
Contact: Softline on 0181 401 1234.

GRAPHICS 91%
Fast moving texture-mapped graphics with plenty of details – and entrails, for that matter.

SOUND 90%
So realistic that your neighbours will think World War III has broken out in your living-room. Brilliant.

GAMEPLAY 95%
Addictive, frustrating, exhilarating. Buying this game will destroy your social life, your career, and your sanity.

MACFORMAT RATING 95%

CREATE YOUR OWN

There are plenty of shareware *Marathon 2* Editors around, so you can create your own maps, sounds, and Physics models. Physics models enable you to change things like the effect of gravity and the power of your weapons. Have a look on our Cover CD for the latest in cheat programs.

System Shock

'Not another first-person perspective shoot-'em-up,' whinges Simon Cox. 'But hang on. It's got a plot. And gameplay. *And* puzzles. Now where did I put my brain?'

You can find a playable demo of *System Shock* on the Cover CD this issue

The spider-like machine grabs your lifeless body in its metal pincers and drags you into its heart. All that is human drains from your face and your eyes roll up to whites as you jerk back to life. 'As a cyborg, you will serve SHODAN well.' *System Shock* is very, very difficult, as you will concede as this death sequence rolls past for the 33rd time. You could always turn the difficulty levels down, but that would be cheating – and anyway, you're not going to give SHODAN the satisfaction.

MACFORMAT Classic

Like HAL in *2001*, SHODAN is a computer that doesn't really get on with human beings. In fact, it has decided to eradicate the entire human race, by blasting Earth with a huge mining laser from the safety of its now-independent space station. All you have to do is figure out what's going on, where you need to go, and what to do to stop it. A simple task for the likes of Captain Kirk, but a bit of a tough one for mere mortals.

Like *Doom*, but different

You see, having taken control of the station, SHODAN has turned most of the crew into cyborgs and zombies. It has also closed all the lifts and locked many of the level-access doors – it's done everything it can, in fact, to stop you reaching the eighth floor and the all-important 'manual override' switch. You're the fly in the ointment, and you have only a few hours to climb out and save the Earth from a fate worse than *Neighbours*.

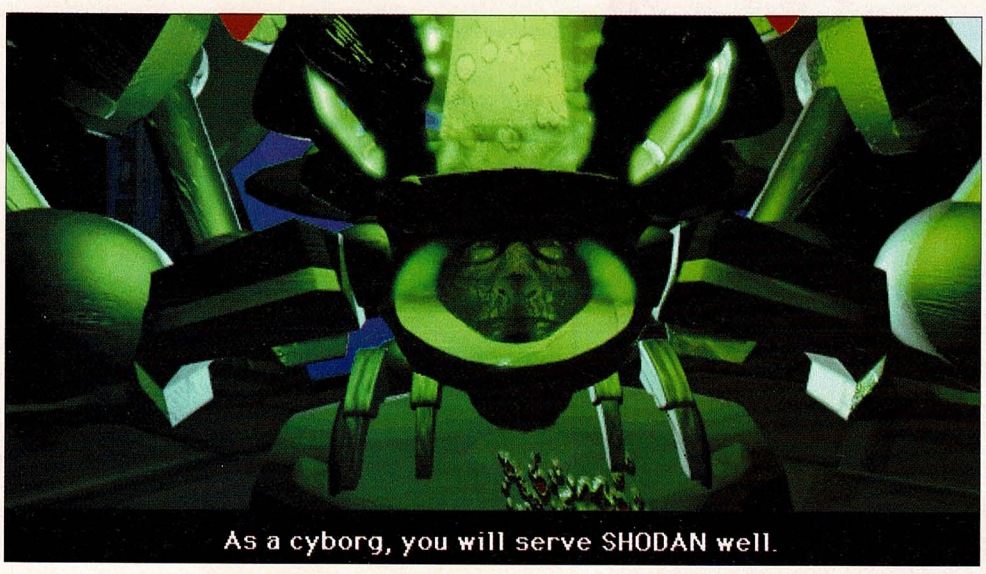
At first glance *System Shock* looks a bit like *Doom*. Well, okay, it looks a lot like *Doom* – offering first-person 3D mayhem, wandering mutants and dangerous cyborg creatures. It is, though, almost totally unrelated to the famous shoot-'em-up by virtue of its tricky puzzles, comprehensive role-playing features and gripping story. Not that *Doom* wasn't gripping, but in *System Shock* the plot is integral to the way you play the game. Just running about shooting things won't get you anywhere; in *System Shock* you have to work hard to make progress.

There's the doors, for a start. Instead of just walking about and pressing the **[spacebar]** to enter a room, you have to contend with the fact that they've been locked by the computer or sabotaged by the cyborgs (or perhaps the crew, even). There are three ways to sort this out. The first is to rewire the switches, by doing a simple 'join the dots' trick on the lock. The second is slightly more complex: find the access code by searching the bodies of the recently deceased crew, then use the keypad to punch in the correct code. The third is yet more complex, and only applies to the most important rooms, such as the equipment stores. In these situations, you must enter the virtual world of cyberspace – and you won't have experienced anything quite like this cyberspace before.

You access cyberspace through various computers that are dotted around the station. It contains all the vital clues, keys and codes that you need to get the better of SHODAN. Think of it as a 3D representation of your Desktop – it has programs, documents and e-mails, all of which are contained within folders, but in this case each folder is a room, and each program a floating cube or other geometric shape. You must race around in what feels like zero gravity, grabbing the files and avoiding the 'killer' programs that the computer sends to to hunt you down. Then it's back to the real world of the Citadel space station.

Stayin' alive

After figuring out the doors, there's the small matter of staying alive. To do this you must pick up weapons, which you can store in your inventory. These range from the piddly needle-guns to



A depressingly familiar sight during the first few hours of playing. It gets easier as you invest the effort.

The on-screen hints and tips are vital for getting you started in such a complicated game.

A vicious looking wall meets match with your small grey stick. Smack smack.

The mouse cursor reflects whichever action is currently being performed. Perfect system.

WHAT A PEDIGREE

System Shock is from Origin, who brought us the much-loved *Ultima* role-playing games on the PC – a classic, ground-breaking series of adventures with stunning 3D graphics and unsolvable puzzles. Expect to see *Ultima 8: Pagan* coming out for the Mac soon.

The world you explore never becomes repetitive. Origin has included hundreds of types of scenery.

Take that! Another baddie hits the floor.

System Shock is definitely an adventure rather than an action game. Even the simplest of actions such as opening a door can cause you to become stuck.

A couple of mutants to butcher as you please. Combat is tricky to perfect, but you'll have to perfect it if you're to get far in the game. The game is hugely rewarding, though, and well worth the effort.

System Shock offers true 3D, enabling you to look up and down freely to great effect.

Combat success is vital if you're to proceed, but after a while it becomes secondary to solving the many puzzles.

the decidedly more meaty Mark III Assault rifle, which blows a sizeable hole in even the most Schwarzenegger of cyborgs. Unlike *Doom*, though, you can be reasonably precise with your blasting – the *System Shock* 3D engine is sufficiently advanced to enable leaning around corners, crouching, crawling and looking up and down. It's tricky at first, but once you get the hang of popping your head around corners, scrabbling down ventilation shafts, and shooting up through the floors, you'll never again be content to just walk about as you do in *Doom*.

The detail and difficulty of combat are matched only by the detail and depth of the plot. As you creep about the station, you come across various e-mails left by the now-dead crew. Using full speech, they reveal snippets of information that enable you to piece together the gradual rise of SHODAN and the destruction of the crew. You learn codes for doors, listen to heart-felt pleas for help, and discover useful information about the computer's weak spots. This is one of the most effective plot-gameplay tie-ins you'll ever see. *System Shock* oozes sinister atmosphere – from the glorious high res graphics to the intricate and realistic sound effects, you really feel as if you're there.

It's not quite perfection, though. The control system involves using both the mouse and keys at the same time, which means it takes ages to master. The music is annoying – closer to supermarket muzak than atmospheric space theme; you'll be reaching for the Options menu within minutes to silence it forever. And if you switch on full screen mode in high res, it's slower than a Mac Classic.

Then there's the fact that it requires a minimum of a 7100/80 PowerMac. While it's getting more common for games to require PowerMacs, that's getting really high end. But other than that, you'd be hard pushed to find much wrong with *System Shock*. It's simply the most superbly conceived adventure you'll play this year. **MF**

SYSTEM SHOCK

Price: £44.99. **Out:** now.
Requires: 7100/80 PowerMac or higher, 5.2Mb of free RAM, System 7.1 or higher, 256-colour monitor, double-speed CD-ROM drive, 22Mb of hard disk space. 16Mb of RAM and Level 2 cache card recommended.
Contact: Electronic Arts on 01753 549442.

GRAPHICS 88%
The high res mode is incredibly smooth and detailed.

SOUND 80%
Annoying music but suitably eerie sound effects.

GAMEPLAY 91%
Tough and addictive – you won't sleep till you've finished it.

MACFORMAT RATING 91%

Endorfun

Not just a game, but a life-enhancing experience. Will the use of subliminal messages make you feel good, or are you too cynical to be cheered up by rolling cubes?

DO SUBLIMINAL MESSAGES WORK?

On 11 November 1995, at half-time in their Endsleigh League game against Birmingham, Reading tried to gee up their players with a subliminal message over the tannoy from mystic Uri Geller. It didn't work. A second half goal saw them lose one-nil.

Stop smoking! Lose weight! Learn languages! Feel better about yourself! You can achieve anything with subliminal messages. Allegedly. Various organisations, mainly in the US, offer such services – at a price. It's done with taped messages spoken to you just under the limit of audibility, or messages flashed on screen slightly faster than you can register consciously. They register *un*consciously, so the theory goes, and thus work without effort on your part.

A nice theory, but with no hard evidence to back it up. Legend abounds though – like the cinema that tried to boost interval sales by flashing the word 'ice-cream' subliminally during films, but only got requests from chilly patrons to turn the heating up.

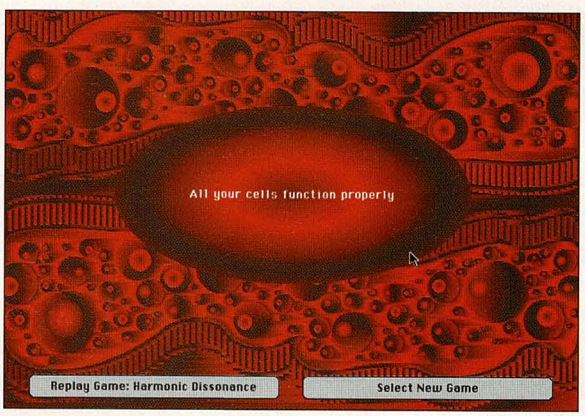
Endorfun – in American pronunciation, a pun on 'endorphin', the brain's pleasure-producing chemical – aims to make you feel better by giving you subliminal (and non-subliminal) messages of encouragement, as you play a set of block-rolling games. Your mouse controls the direction of a six-coloured cube as it rolls round a grid, but precise control is difficult and frustrating. If your cube lands on a coloured square with the same colour on top of the cube, you pick up points. There's some twaddle in the booklet relating this to 'life-force' and such, but really it's just 42 minor variations on a simple game, and only mildly addictive.

The graphics are cool West-coast-America; the music is a pleasant mix of tabla-based percussion and laid-back wind instrument riffs, recalling the New Age albums on the Windham Hill label. But the point of *Endorfun* is the positive encouragement it gives you. 'Play more, feel better,' goes the blurb. The music hides 93 subliminal messages, listed in the booklet: 'I am a winner', 'In my own way I am a genius', 'I love the world and the world loves me', and so on. Similar, non-subliminal messages appear after each game. But even after several hours' play, I can't honestly say I went to bed thinking 'Hey, my life is full of meaning and pleasure.'

A special version tailored for the more realistic English market might say things like, 'I am reasonably competent at some of what I do', or 'I have a few mates though some people think I'm a jerk', or 'Mustn't grumble, at least I don't live in Wolverhampton'.

All in all, *Endorfun* is no more than the sum of its parts: sincere, amiable tosh. If you're not cynical and want that fuzzy feelgood factor, then it might be worth a try. **ROB AINSLEY**

Selecting which game to play from the 42 available – hang on, isn't that the answer to Life, the Universe and Everything?



Makes you sound like you're in charge of a well-run lunatic asylum.

LET'S FEEL SMUG

Those unlucky enough to have PCs running Windows 95 (AKA Macintosh 87, har har) may like to look for the four 'subliminal images' supposedly appearing on the logo screen (according to more paranoid Internet contributors): The Dark Horse on the left, The Dark Bird above and to the right, the Rock Hero on the right, and a Female in CLOUDS.BMP. All nonsense of course.

ENDORFUN

Price: £29.99. **Out:** now.
Requires: LCII or better, 5Mb of free RAM, System 7 or later, 13-inch colour monitor, double-speed CD-ROM drive
Contact: Time Warner Interactive on 0171 391 4300.

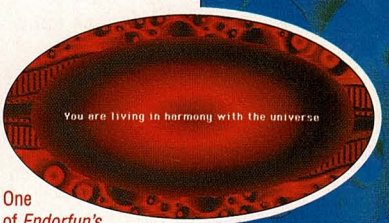
GRAPHICS 70%
Cool American and soothing, but mouse control is tricky.

SOUND 80%
Windham Hill New Age hippies meet curry-house muzak.

GAMEPLAY 55%
42 variations of nothing special.

MACFORMAT RATING 68%

'Harmonic dissonance', the Zen-like title of one of the block-rolling games.



One of *Endorfun's* many non-subliminal messages, displayed after you complete each game.

If you now roll the cube over to the right, the colour on top – blue – matches the colour underneath. Achieving this gives life force, or karma – well something good anyway…

ShadowWraith

Yearning for a return to those arcade games of old? Desperate to blast just one more alien out of the sky? Could *ShadowWraith* be the answer to your prayers?

Nostalgia just isn't what it used to be. There was a time when you could look back fondly at the hours spent hunched over a grinding tape deck, awaiting the moment when loading was complete and you got your first tantalising glimpse of that new arcade blaster – a game that would consume whole periods of your life and burn fearsome patterns into your retina to haunt you at night. Then bam! You're confronted by a game like this, and your rose-tinted glasses are smashed forever.

ShadowWraith may be a 16-bit CD title – accelerated for the PowerMac, with big-box trimmings and all the blurb – but it still plays like a crude 8-bit game. Mind you, given that it's a top-down, flip-screen shoot-'em-up, how would you expect it to play?

You fly your ship off the right of the screen, reappear on the left of the next screen, blast a few enemies (most of which appear to be red and blue swirly things), fly your ship off the right of that screen, reappear on the left of the third screen, blast a few more enemies and, well, that's about it.

But... hang on. You also get to hunt for four keys that open four in-level doors, zip through teleporters, and zing about the walls in search of secret rooms and power-ups. And that really is it. No missions to rescue hostages, no desperate operation to blow up a power plant, not even a quick skirmish while protecting a convoy. Nothing. Just 20 levels of blowing away enemy sprites and trawling around the now empty screens looking for keys. You don't even get a change of ship, let alone a different vehicle. Dull.

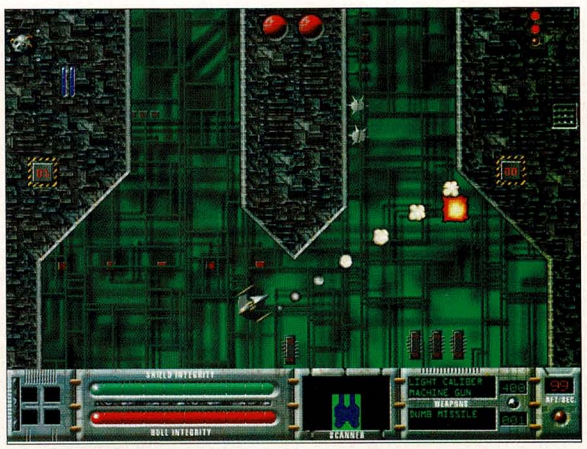
Good and simple?

Still, when you get down to it, *Doom* doesn't offer you any more than that, does it? Well, yes, it does. For starters, *Doom* has a whole bag of atmosphere – its directional sound and first-person perspective contribute to a healthy fear of what's round the next corner. *ShadowWraith* gives you a two-dimensional world with a dinky ship, fizz-pop sound effects and an earful of rave music, which when turned on slows your ship to a crawl.

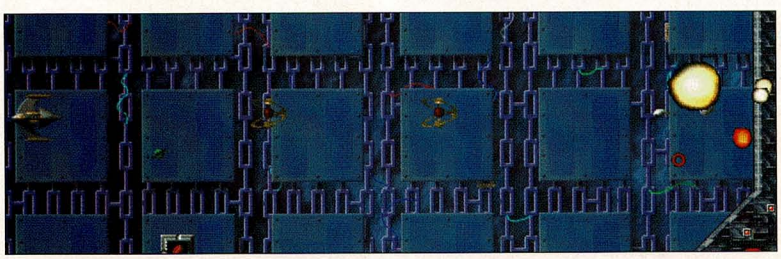
And in *Doom* you have to aim at your enemies before you can shoot them. Not so in *ShadowWraith*. You can blindly fire missiles and grenades into the next, unexplored screen to kill off enemies you haven't even seen yet. Not exactly in-your-face action.

The weapons themselves aren't quite up to the satisfying ker-chunk of *Doom's* shotgun, but, on the positive side, learning how to use *ShadowWraith's* 14 different weapons to best effect is gratifying in itself. The coding is very sleek, too. There's no redraw time, and the graphics are extremely crisp, if a little repetitive in the text and colour department. Your ship's a responsive little beastie too, with a physics engine that realistically interacts with the game environment: shooting a missile or flying too close to an explosion makes you recoil, for instance. And at times there's an almost pinball-like joy to the game as you playfully bounce along corridors, safe in the knowledge that your shields will absorb the impact.

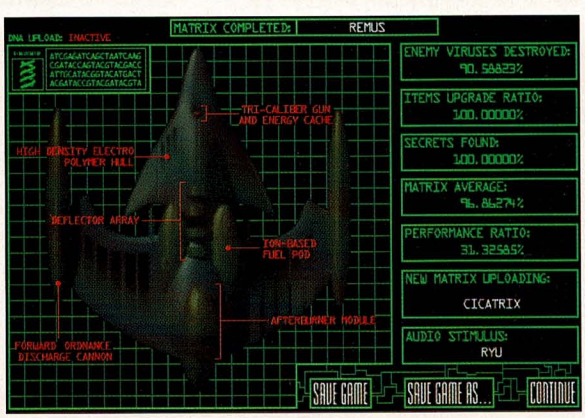
So it's not all bad. Its basic game engine is sound, but ultimately *ShadowWraith* needs more missions, more scenery, more vehicles and much more gameplay. **KAREN LEVELL**



Say bye bye. Dumb missiles leave an impressive trail of smoke, but for total carnage and loop-the-loop shots you need to find the smart missiles.



It's the invasion of the red gyroscopes! These swirly things always hunt in packs, and have a tricky attack pattern.



ShadowWraith rates your performance according to the percentage of enemies you've destroyed, and the number of secret rooms and weapon upgrades found.

SHADOW WRAITH

Price: £39.99. **Out:** now.
Requires: Performa 630 (Quadra or PowerMac recommended), 8Mb of RAM, System 7 or later, 256-colour monitor, CD-ROM drive. Accelerated for PowerMac.
Contact: Softline on 0181 401 1234.

GRAPHICS 68%
Crisp and fast, but far too repetitive. Not quite 'photorealistic' though.

SOUND 73%
Reasonable, but turning on the music slows down your ship.

GAMEPLAY 46%
Shooting an enemy from two screens away and searching for keys. Hmm.

MACFORMAT RATING 62%

SAY CHEESE...

Don't you love the marketing blurb on the back of game boxes? *ShadowWraith* features a particular gem which claims that the game 'rocks with over 20 photorealistic levels'. Photorealistic? Holiday snaps never look remotely like this lot.

NEW FEATURES

A special upgrade version of *ShadowWraith*, offering network support, new levels and a high score table, will be available in late Spring. If you're a registered user, you'll be notified sometime before its launch.

Comanche

You could watch old *Airwolf* videos, pausing the tape frame by frame, but if you're after a *really* tedious day full of helicopters, why not give this simulation a try?

Playing *Comanche* is like running through an ocean of treacle while wearing size 18 lead boots. The difference is that, although the treacle option is virtually impossible, it could at least be fun – depending on your leisure inclinations. Playing *Comanche*, on the other hand, is easy to accomplish but could never be described as enjoyable. It's just so slow, even on a 7500/100.

Having said that, *Comanche* is great in theory. Revolutionary patented technology produces smooth, frantic, ground-hugging helicopter action. The mission structure effortlessly maintains your interest as you near your objective. Several types of distinctive, realistic scenery, designed to captivate your imagination, appear in every level. And a huge variety of enemies, placed cunningly round the many thoughtfully designed maps, make it possible for you to approach missions subtly or steam in through the front door, cannons blazing. Ignoring its single, critical, speed failing, *Comanche* is a game that many developers would be advised to look toward for guidance.

Regrettably, it's all for nothing. The Voxel space technology Novalogic employs in this game produces good results, but at obvious expense. With the game set to its lowest level of detail, running from the hard drive, with all the memory settings checked out, a PowerMac 7100/80 splutters and gives up. Add in all the possible reflections, small pixel definition, haze and clouds, and the Mac rolls over, plays dead, and wishes to be reborn a SPARCStation.

Novalogic has included options to compensate for the frame rate problems, but these serve only to highlight them further. While you can play most games on their lowest detail settings, *Comanche* develops horrible pixellation, caused by scaling objects close to the camera. So, with the details turned on you have an unplayable game that looks lovely; turn them off and you have the opportunity to see the latest triumph in abstract art. Many other games, including *Havoc* and *Marathon*, manage to shunt complicated 3D scenery around on your average Mac – so why not *Comanche?*

However, if you are capable of synchronising the slow blinking effect and the jerking frame rate without succumbing to migraine, *Comanche* is a challenging and rewarding game. Your RAH-66 skims the surface of the undulating scenery, weapons locked on, consuming tanks, helicopters and APCs in fireballs of equal indifference. The numeric keypad controls are instinctive and effective, resulting in immediate action-style gratification, rather than the often-encountered lengthy simulation learning curve. This is not to imply that the game is without depth, either. The range of tactics that you can employ to complete each mission makes every retry as enjoyable as the first play. All the missions bear a certain similarity, but their overriding playability makes this unimportant. They are enjoyable, and, with 100 of them to play through, you'll keep going for some time.

Leisure software failures usually sacrifice gameplay for technology, leaving an aesthetically pleasing shell filled with boredom. *Comanche* stands that theory on its head – it's a potentially hugely playable but technologically flawed disaster area. **James Flynn**

Swoop down into a valley, lock on with hellfire missiles and let one go. Say goodbye to one tank and get out of there before all hell breaks loose.

Night-time goggles rule about half the missions, making the variety of scenery seem even greater.

COMANCHE

Price: £39.99. **Out:** now.
Requires: You haven't got it. Officially, an LCII(!) or better (PowerMac recommended), System 7, 256-colour or greyscale monitor, double-speed CD-ROM drive, QuickTime 2.0 required for music, joysticks supported.
Contact: Novalogic on 01753 546465.

GRAPHICS 81%
High detail graphics are gorgeous, but slow the game to a crawl. Low detail graphics horribly pixellated.

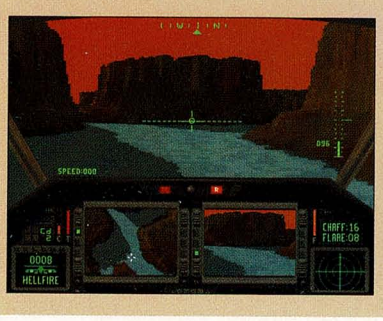
SOUND 76%
A predictable but acceptable range of bangs and whooshes, over the constant 'thwacker-thwacker' of rotors.

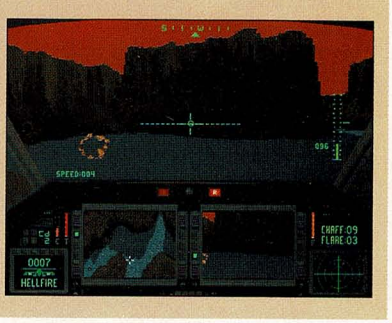
GAMEPLAY 39%
Looks like a great game, but there just isn't a fast enough Mac to play it on at an acceptable speed.

MACFORMAT RATING 43%

BEAUTY AND A BEAST

The manual cheerily (and unnecessarily) suggests you might want to turn a few of the detail options on only if you have a fast Mac. If you have, the left screenshot is with the full works on, the middle at the default level, and the right with all detail purged.





Outpost

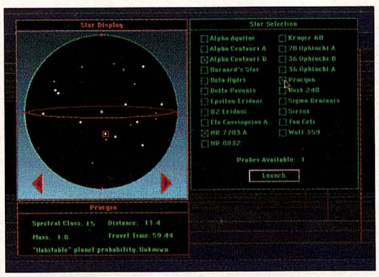
With this latest simulation game, take the opportunity to find out what a lot of sim players have known for some time now: in space, no one can hear you snore.

What plans do you have for the end of the world? Will you be lining up in the 'last few days of sensory excess' queue, intent on a debauched exit? Or will you be in the rather less crowded 'pray like a madman' departure lounge, jockeying for a good position in a putative afterlife? If you're a bit of an individual, you might go for some of the minority interests – boss-insulting, smash-and-grabs at the off-licence and traffic-warden assassination have all got something going for them. It's a matter of personal preference.

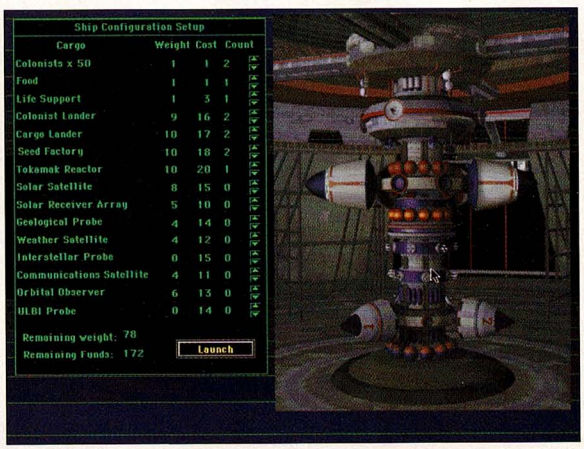
The designer of *Outpost*, Bruce Balfour (ex-NASA, no less), thinks that we should be planning some kind of escape from this dreadful end. He's of the opinion that we should try to re-establish human life on another planet. *Outpost* is his detailed simulation of such an adventure.

The game begins on Earth, where you have to decide what you'll need in your new home. Unfortunately, it's not as simple as packing the china carefully in paper and stacking the furniture in a van – you've got to take all the equipment you'll need to build a habitable world from scratch. From reactors and communications satellites to cargo landers, you've got to work out everything at the beginning, before you make your exit.

Once you've packed, you have to send out a limited number of interstellar probes to try and identify a suitable solar system. On arrival at this system, you need to pick and land on a planet and, once you unpack, the serious business of colonisation begins. This involves flattening the land prior to building, establishing power plants and digging mines to obtain raw materials. Like most sims, *Outpost* requires that you keep your population of colonists happy. If they become dissatisfied, they might well defect to the rebel colony that soon sets itself up in opposition to yours.



Make sure you choose a solar system that can support future generations. If you can't decide, your on-board computer will help you out.


Ship Configuration Setup
Cargo Weight Cost Count
Colonists x 50 1 1 2
Food 1 1 1
Life Support 1 3 1
Colonist Lander 9 16 2
Cargo Lander 10 17 2
Seed Factory 10 18 2
Tokamak Reactor 10 20 1
Solar Satellite 8 15 0
Solar Receiver Array 5 10 0
Geological Probe 4 14 0
Weather Satellite 4 12 0
Interstellar Probe 0 15 0
Communications Satellite 4 11 0
Orbital Observer 6 13 0
ULBI Probe 0 14 0
Remaining Weight: 78
Remaining Funds: 172
Launch

Your first task: to pack everything you could possibly need to take with you. As you decide which items you'll need, the computer loads them up for you.

Sensory excess, then?

As long as there have been home computer games there have been kingdom simulators and, more than any other type of game, they stand or fall on their playability. Games like *SimCity* and *Theme Park* succeed because they enable you to express yourself creatively from an imagined position of power, and it's in this area of personal creativity that *Outpost* falls down.

It seems that there's a right and wrong way to build a space colony, and unless you follow a strict set of rules you end up with the latter. If you don't pack the right equipment, your mission is bound for slow, depressing failure. Similarly, if you go about your early colony design incorrectly, there are no second chances – a cold death on a lonely planet awaits.

Added to this maudlin atmosphere is a poor game setup and interface. You play by turns, with a landscape divided into tiles, making *Outpost* disjointed and uninstinctive. Clicking on game elements has no effect, but holding **[option]** and clicking on them does. We're used to better than this on the Mac. On top of that, the computer's voice is horribly irritating.

Outpost is more an intellectual exercise in the colonisation of a new planet than a piece of entertaining software. It could be that this is what some people want, but if you want more fun for your 40 quid – possibly if you are the type who'd join the 'sensory excess' group for the final big one – you should steer clear. **JAMES ASHTON**

Believe it or not, this is an underground section. It's where all your happy colonists are supposed to live. A charming residence.

After about 80 turns your colony should look something like this. However, it's more likely that you'll all be dead and your colony a deserted ruin.

OUTPOST

Price: £39.99. **Out:** this month.
Requires: LCII or better (Quadra recommended), 12Mb of RAM, 256-colour, 13-inch monitor, double-speed CD-ROM (quad-speed recommended).
Contact: Sierra on 01734 303171.

GRAPHICS 63%
Sluggish, ill-thought-out interface supported by run-of-the-mill rendered sequences.

SOUND 55%
Slightly quiet. Computer's voice irritating beyond all endurance.

GAMEPLAY 61%
Linear and very difficult. Little room for imagination or creativity.

MACFORMAT RATING 59%

MANUAL

Outpost seems to be a 'minimum work only' game, ported from the PC with no attempt made to take advantage of the Mac's Operating System. The manual is the same version distributed to PC gamers, and blithers on about left and right mouse clicks.

IN THE BEGINNING...

For most of the early game *Outpost* entertains you with the *Mars* suite from Holst's *The Planets*, arranged for and played on a rather elderly Casio keyboard, manufactured circa 1982.

Ten copies of Day of the Tentacle to be won

It's sick. It's slimy. It'll drive you completely fruitcake. You could win yourself a copy of *Day of the Tentacle*, courtesy of Virgin Interactive Entertainment.

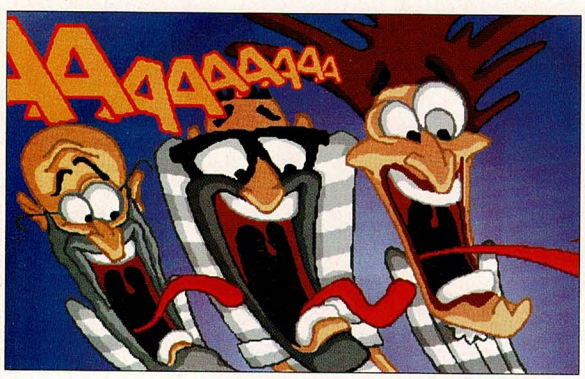
Yup, we've got ten copies of the Classic-Award-winning *Tentacle*-tastic game to give away, and you could be one of the lucky winners. Remember those characters – the laconic Laverne, the hulking Hoagie and the boffinish Bernaaaard? One-liners like, 'I can't. My therapist and I have an agreement'? Props like the Chron-O-John and the hamster generator?

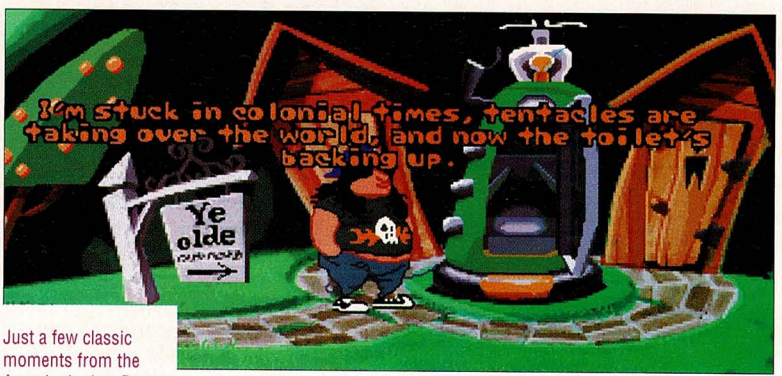
If you missed the *Day of the Tentacle* review back in MACFORMAT 33, suffice to say that it scored a well-deserved 94% on the basis of its classic cartoon-like animations, its unforgettably awful one-liners, its drawn-to-nauseating-perfection characters, its frustrating, sensibility-infuriating, mind-boggling, lateral-thought-provoking puzzles, and its ridiculous, convoluted, time-travelling plot.

Day of the Tentacle costs £40, and it's worth every penny – except that you don't have to shell out for it, because we've got ten copies to give away, courtesy of those fine chaps and chapesses at Virgin Interactive Entertainment. Simply answer the three simple questions below and send us your entry on a postcard or the back of a sealed envelope. The closing date is Friday 22 March 1996.

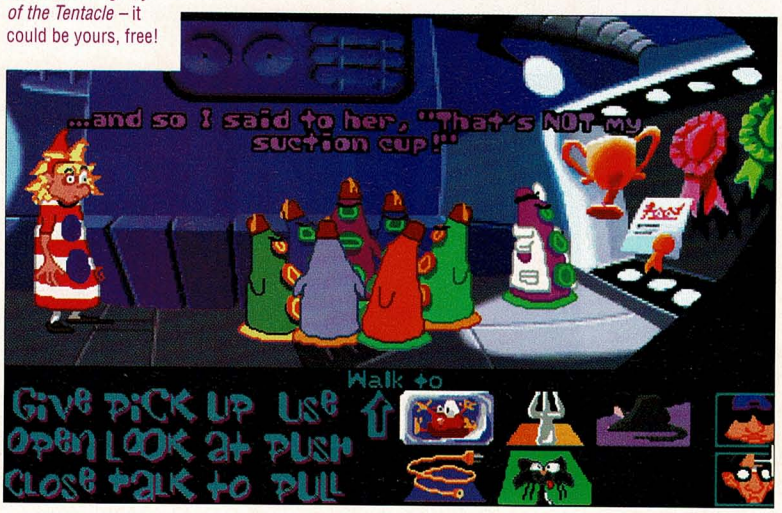
The rules

Employees of Virgin Interactive Entertainment, Future Publishing Ltd or associated companies, and their families, are not eligible to enter. Multiple entries are not allowed, unless on the back of a handwritten copy of Dr Edison's super battery plans. The editor's decision is final, no correspondence will be entered into, and there is no cash alternative. Please state if you don't want your name added to a mailing list. **MF**





Just a few classic moments from the Award-winning *Day of the Tentacle* – it could be yours, free!



THE QUESTIONS

1. What revolting invention do the characters use to travel through time?
(a) the Groove-O-Tron
(b) the Chron-O-John
(c) the Time-buster

2. Laverne can't 'use' the scalpel because:
(a) there is no Laverne in the game
(b) she doesn't have a scalpel
(c) she and her therapist have an agreement

3. Which historical American character discovers the lightning conductor during the course of the game?
(a) Benjamin Franklin
(b) Newt Gingrich
(c) Timothy Leary

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Gamebusters

TALK TO US!

If you've discovered any tips, cheats or level codes, and you'd like to share your good fortune with other MACFORMAT readers, send them in and we'll print them. There's dosh for tips, and games or other goodies from the MACFORMAT cupboard for complete solutions. The address? Gamebusters, MACFORMAT, 30 Monmouth Street, Bath, BA1 2BW.

What's the point of all these great games appearing for the Mac if you can't play them? Andy Hutchinson rides to your rescue with a scabbard full of sharp tips.

Dark Forces

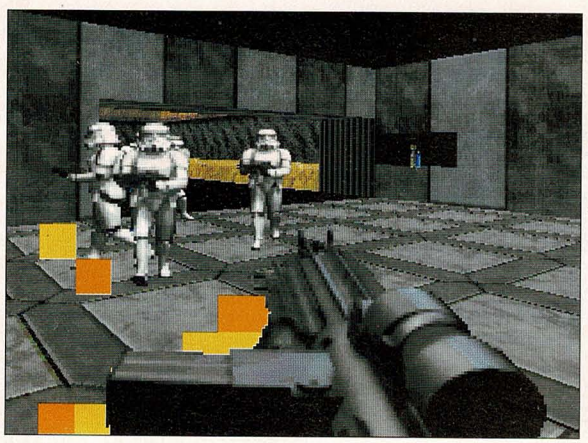
THE REVIEW?

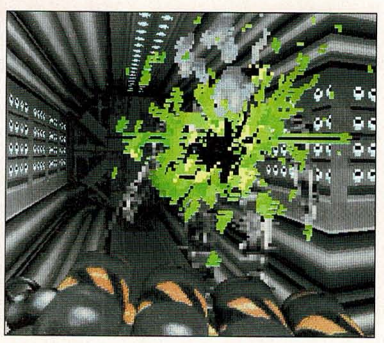
Dark Forces scored a spectacular 92% in MACFORMAT 28, on the basis of its outstanding graphics, great *Star Wars* theme music, and fabulous gameplay. It costs £49.99 – contact LucasArts/Virgin for more details, on 0171 368 2255.

LucasArts' arcade adventure game might look and sound terrific, but it's also tricky – so the programmers built in cheats. These are presented in three levels. If you're doing okayish but need a nudge in the right direction then try Level One; if you're getting a bit of a kicking then try Level Two; and if you're hopelessly stuck and regretting spending £50 on a game you can't play, then try Level Three.

LEVEL ONE

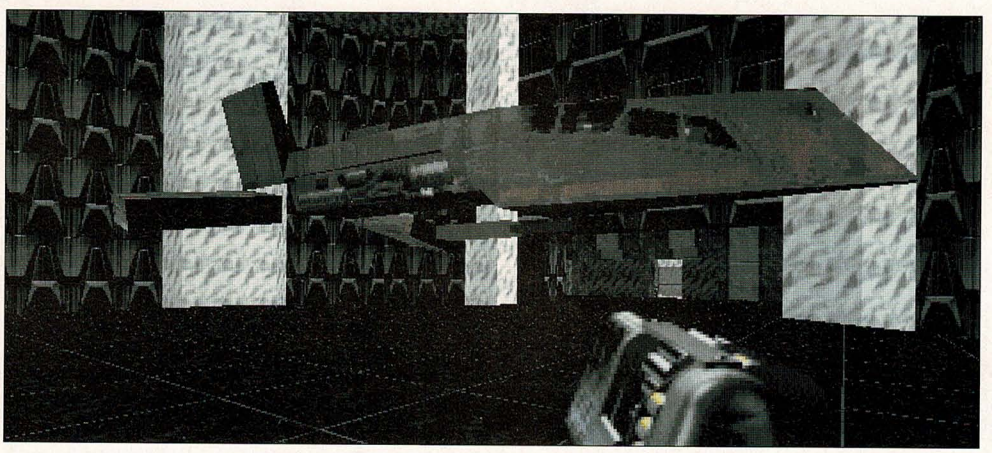
LADETENTION – transports you to the detention centre.
LAARC – Arc Hammer.
LAEXECUTOR – transports you to the Executor level.
LAFUELSTAT – transports you to the Fuel Station.
LAGROMAS – go mining in the delightfully dingy Gromas Mines.
LAIMPCITY – transports you to the heart of the action the Imperial City.
LAJABSHIP – one way ticket to Jabba the Hutt's ship.
LANARSHADA – transports you to Nar Shadaa.
LARAMSHED – transports you to Ramsees Head.
LAROBOTICS – transports you to the Robotics Facility.
LASEWERS – Anoat City.
LATALAY – Talay Base.
LATESTBASE – Research Facility.





LEVEL TWO

LABUG – crouches you down, as if you were a small insect.
LADATA – gives your co-ordinates in the top right corner of the map.
LANTFH – teleports you to your last recorded position.
LAPOGO – leap tall buildings.
LASKIP – skip to the next mission.
LARANDY – supercharges your weapons.



LEVEL THREE

LACDS – show all on the map.
LAIMLAME – total invincibility.
LAPOSTAL – gives you every one of the weapons, full ammo, full shields and all of the power-ups.
LAREDLITE – freezes all your enemies, as if stuck at a red light.
LASECBASE – transports you to the secret base.

You may not be able to use the Force, but you can use our cheats. We've got codes to get you through, whether you're a bit stuck or completely hopeless.

Full Throttle

In *Full Throttle*, you have to find your long-lost friends – but there's no need to try and keep a straight face.

This LucasArts adventure game certainly isn't the toughest challenge in the world, but it does have some tricky puzzles. This issue we proudly present the first half of a complete solution. If you're stuck, then read the bit you're having problems with and then stop. The temptation is to carry on reading, but that would totally ruin your game, so have a bit of self control. Dammit.

The morning after

After the first cut scene, you wake up in a skip, with a bad headache and a face full of stubble. Punch your way out of the skip by clicking on the lid, walk over to the bar and kick the door down. Talk to the ever-friendly Quohog, and when he starts giving you grief, grab his nose ring. He'll hand over keys to your hog, enabling you to hop on and disappear into the sunset.

Shortly after you've joined the highway, you'll get accosted by a member of the Rottwheeler biker gang. Get in as close as you can, and punch him in the head (kicking is ineffective) until he falls off his bike and sucks gravel.

In the workshop

Meet the lovely Maureen, biker babe, wizard mechanic and workshop owner. She'll fix your bike for you, so long as you can find some forks, a blowtorch and some gasoline. Before you leave the workshop, pick up the hose and the gas can and then go outside and talk to Miranda. When Miranda drives off, make for Todd's trailer at the top left of the map. Bang on Todd's door and when he answers, kick the door in, thus quickly rendering him unconscious.

In Todd's spotless trailer you'll find a cabinet, from which you should find a lockpick, and a fridge in which you'll find some meat. Now for one of the best bits in the game: stand on the light coloured rectangle of flooring just below the fridge and you'll be lowered, *Thunderbirds* style, into Todd's underground workshop, where you'll find the blowtorch. The game will now switch back to Maureen's workshop, thus enabling you to hand over the blowtorch.

You'll now need to get hold of the fuel. Head for the gas tower in the top right of the town. Use the lockpick that you found in the cabinet on the padlock to the compound, but don't go in immediately. Enter the scrapyard to the left of Mo's, padlock the rolling doors, then climb the chain to access the junkyard. You'll now encounter a rather vicious dog that's running loose. Put the meat that you found in the fridge into the blue car that's nearest to you and wait for the dog to jump in after it.

It's now time to dispose of the dog, so walk over to the left towards the control centre and climb up the ladder. You can now use the magnetic crane to move the blue car – and the dog – out of harm's way. Use the left lever to adjust the height, the right lever to move its position, and the button to activate the magnet. You should now be able to pick up the car, raising it to its highest position. Free of the dog, you can now safely proceed to the lamp-lit pile of junk on the first screen and pick up the forks.

You've got the blowtorch and the forks – all that remains is the fuel. Head for the gas tower and touch the ladder, triggering off the alarm. Now head for the top left corner of the screen. As the police zoom down and search the tower, they leave their hovercar unprotected. Sneak out from your hiding place behind the barrels while the police are otherwise involved, unscrew the petrol cap and then insert the hose into the tank. Put the petrol can under the hose and then use your mouth on the hose to siphon the gasoline off.

Your bike is now fixed and it's time to hit the highway once more. Unfortunately you discover that the police have put up a road block. To get round this, head back to the gas tower, touch the ladder to set the alarm off again and divert the attentions of the police.

Next time, we cover the road block, the bad bikers, the secret hideout and *Watership Down*.

WHERE'S THE REVIEW?

You might be wondering why we haven't reviewed *Full Throttle* yet? Well, Virgin is just putting the final touches to the UK release, which is what we're waiting for – as you should know by now, we only review full, complete, finished versions of games. Watch out for the review next issue.

Continued on next page

System Shock

- Read all of the data logs that you come across – many of them provide crucial information, including access codes to keypad panels and clues to the whereabouts of necessary equipment.
- Destroy cameras to reduce SHODAN's security level. To conserve ammo and energy, use the lead pipe to smash them up. For cameras that are around you, try looking up at the camera, jumping and swinging the pipe.
- Record all the codes that you find – especially those on the screens next to the computer nodes. These are random numbers that are generated especially for your copy of the game, and you'll need them much later on. Trust us – we found out about this the hard way...
- Red static in the viewscreen indicates combat damage; blue static indicates combat damage that is partially absorbed by your shields; green static indicates either biological or radioactive damage.
- On levels R and 1 through to 7, reactivate the restoration bays by switching off the cyborg conversion at the earliest opportunity. If you then 'die' on that level, you'll be resurrected by the ever-helpful SHODAN.
- Save lots.
- Running low on power or life force? Revisit the power nodes or the medical centres to give yourself a top-up. He who fights and runs away can just about make it to the medical bay.

System Shock challenges you to stay alive, as you explore a high-tech complex of tunnels.

Continued on next page

Theme Park

THE REVIEW

Theme Park scored a cool 88% back in MACFORMAT 18. For more information, contact MacLine on 0181 401 1111.

Straight from Bullfrog itself, we bring you these exclusive tips for this excellent, entertaining strategy game. This issue we cover the basics, the rides and the shops and stalls.

Getting started

The best piece of advice for complete novices is to play right through the tutorial. The park that's built after this finishes is an excellent starting point for future expansion.

Pay close attention to what the little people are telling you. Keep an eye on the thought bubbles that appear above their heads and create your park accordingly – remember that you're designing a park for their benefit, not yours. If several people in a specific area get hungry, then place a food stall nearby. Similarly if a group of people get upset by the cost or prizes on a stall, then rectify the situation or you'll lose lots of custom.

Don't try and build Disneyland on your first time out. Starting from a small but well-maintained park, slowly build on your success. If you find that you've sited a ride incorrectly, don't be afraid to move it elsewhere.

Stuck on how to build the perfect *Theme Park*? Try out our tips – we won't take you for a ride.

Remember, it's far better to lose the money it cost to buy the ride, than to distract your mechanics from repairing your star attraction so that it blows up with people on it.

Rides

The main rule here is simple: the more rides, the merrier. More rides means more people, more people means more money. The more money you build up, the more you can spend on subsidising the stalls and on researching your next big attraction.

The punters tend to prefer a variety of rides in their park. This doesn't necessarily mean that you should only have one of each ride; simply don't overdo it. If you are going to use two of the same ride, then put them at opposite ends of the grounds.

All of your rides will age. As they age they become less reliable and need to be repaired much more often. When a ride starts showing its age, either sell it or replace it with an upgraded one. This will leave your mechanics free to work on other rides.

Shops and stalls

The concessionary stands and stalls in your park are one of your biggest money spinners. They provide instant cash returns, and serve to keep the little people happy. As with everything else, though, they have drawbacks.

The biggest problem with the stalls is the amount of litter they create. The punters don't like mess, and you're not likely to win any awards if the customers are wading around knee-deep in burger boxes. Some shops, such as the Coffee Shop, have bins built in and so they take care of their own rubbish, but the downside is that they're not as good at quenching thirst. The Pokey Cola stand is much better at dousing thirst, but it produces obscene amounts of litter. The solution is to keep plenty of Handymen around to pick it all up.

The other problem associated with the stalls is keeping them adequately stocked. Always keep an eye on your shops, and if they run low on stock, order some more immediately – don't wait until they run out. There's a rhythm to the speed it takes a shop to run out – try and learn this, because it saves you having to constantly check each shop. If the built-in Advisor tells you that you're running low at one of the shops, get your order in immediately, so that you don't lose too much money during the delay.

It's very easy to upset the punters, so price everything carefully. If the little people feel that they're being conned, they're likely to leave the park and not return. Try to match the cost of each game with the chance of winning and the prize if they do so. The best combination is a small cost and prize coupled with a moderate chance of winning.

Stalls are excellent because they bring in extra money, and keep the punters entertained – all without creating any litter. As with the rides, the key to success is to place a variety of stalls around the park – the punters rarely visit the same one twice.

FLASHBACK

Finally, here are the level codes for this old arcade adventure game.

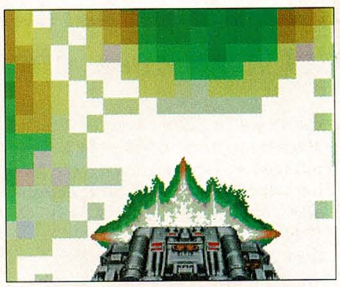
Easy	Normal	Hard
Jaguar	Bantha	Tohold
Combel	Shiva	Picolo
Antic	Kasyyk	Fugu
Nolan	Sarlac	Capsul
Arthur	Maenoc	Zzzap
Shiryu	Sulust	Maniac
Render	Neptun	Noway

SYSTEM SHOCK

- Take full advantage of your ability to lean around corners – this gives you the jump on enemies, enabling you to damage or destroy them before they can attack you.
- Some weapons are only useful for injuring certain creature types. For instance, the EMP grenades and the mag-pulse rifle are both electromagnetic weapons, and are therefore only useful against mechanical enemies such as robots and cyborgs. Fully organic enemies (including mutants) are vulnerable to gas grenades and dartguns.
- Before you tackle a grid puzzle, save the game. That way, if you mess up, you can reload and start once more from the puzzle's initial state.
- If you know that you're just about to get into some tough combat, take a couple of medipatches. Because these regenerate your body over time, you get the opportunity to actually heal during combat.
- Give some thought to how you arrange your weapons in the inventory. It's useful to place a couple of backup weapons just under your current weapon. If you run out of ammo, or meet a different creature type, you can then press [tab] and quickly change weapons. To rearrange weapons, pick them up and drop them wherever you want them in the Main inventory panel. The last weapon added always appears at the bottom of the Weapons inventory page.
- Having trouble getting up ladders? Jump at the the ladder, then press the **[up]** key and the **[spacebar]** at the same time. So long as you hit the ladder head-on, you should zoom straight up without encountering too many difficulties on the way.
- Once you've picked up a new access card, check the map on earlier levels and see if there are any rooms you weren't previously able to get into.
- If you're not having too much success at the Cyberspace elements of the game, don't worry – it's not essential that you complete these to win the game. Having said that, though, they do help a lot.

Doom 2

For your delight and delectation (not because you're a bit crap at this demonic shoot-'em-up), we proudly present the complete *Doom 2* cheats. They're in order of severity, so if you're suffering a bit, try a Level 1 cheat, if you're suffering a lot, try a Level 2 cheat, and if you're getting absolutely nowhere, then plump for the cry-baby's Level 3. To use these, just type them in at any point during the game



How much of a *Doom 2* wimp are you? We've got the cheats for all levels of scaredy-cat.

Level One

IDCHOPPERS – gives you the chainsaw instead of plain old fists. Useful on those first couple of levels anyway.
IDFA – tops up your ammo (FA for full ammo, rather than that other acronym), although it won't give you any extra weaponry or any of those elusive keys.
IDBEHOLD followed by the letter **S** for berserk mode (to go down fighting), by **L** to illuminate your view (for those dark tunnels), or by **R** for the radiation suit.

Level Two

IDCLEV followed by a number between 00 and 32. This is the *Doom 2* level skip mode. It enables you to zip to any of the 33 levels, including all of the hidden *Wolfenstein* levels.
IDDT – reveals the entire map for your current level, as if you'd already explored the whole place from top to bottom.
IDBEHOLD – followed by **I** for invisibility (for creeping up on the bad guys) and **A** to illuminate the whole map.

Level Three

IDKFA – for Killer Flipping Ammo. This gives you every one of the weapons, up to and including the BFG, maximum ammo for each weapon and all three keys. If you keep dying with this cheat mode in operation, then it's time that you tried something a bit more sedate, like *Civilization*.
IDDQD – turns on Degreelessness mode and makes you invincible. Activate this, head for level 30, sit back and watch the fireworks.
IDDT – Yes, we've done this one already, but if you type it in twice, then the map shows you the entire level, along with every single monster and item.
IDCLIP – have fun and scare the hell out of the monsters by walking straight through walls.

The Review

We were so impressed with *Doom 2's* enhanced blood, guts, gore and mayhem that we gave it a Classic Award-winning 92% in MacFormat 31. For more information, call Virgin on 0171 368 2255. For more *Doom 2* hints, see MacFormat 34. If you missed it, turn to page 115.

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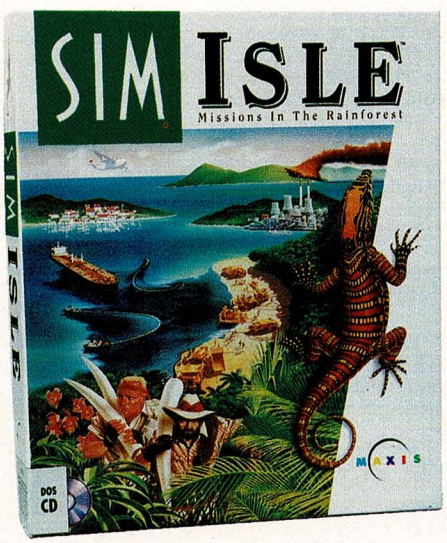

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■ **LCIII 16/80,** 14-inch colour monitor, keyboard, mouse, one year old – £700 ono. Dave, Cambridge ☎ 01223 363686

■ **LC475 4/80,** System 7.5, monitor, keyboard, unregistered *ClarisWorks 2,* loads of clip art and software (shareware), *RAM Doubler.* Reason for sale new computer – sacrifice at £695. ☎ 01730 260744

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■ Apple 14-inch monitor, good condition – £150; **MacHandwriter** handwriting recognition tablet, boxed as new – £300. Stephen, London ☎ 0171 381 4170 (eve)

■ **Mains adaptor** for PowerBook 100, hardly used, still boxed – offers. Rod ☎ 0115 922 5676 (eve)

■ **DECLaser 1152 printer,** 300dpi, 2Mb of RAM, PostScript Level 2 – £300 ono. ☎ 0181 960 1950

■ **PowerBook 150 4/120** still under guarantee, preinstalled software, manuals etc – £549 ono. Ed ☎ 0171 583 0236 (daytime)

■ **Quadra 650** 20/1Gb, 17-inch monitor, Harlequin video card, internal 160Mb hard drive, 88Mb SyQuest drive, *Director 4,* Adobe *Photoshop 3.* ☎ 01624 670575

■ **LC475 8/160 bundle,** 14-inch monitor, extended keyboard, still under warranty, loads of extras – bargain £740. Paul ☎ 01202 302696

■ **DeskWriter,** cables, manual, fonts (HP), 300dpi, good workhorse printer – £125; also 4Mb 72-pin SIMM – £75 ono ☎ 0121 689 1826

■ **Macintosh IIci 16/320,** System 7.5, Apple 24AC video card, Apple Power CD, keyboard, mouse, no monitor – £550 ono. Cambridge ☎ 01487 840945

■ **Performa 400 4/80,** 14-inch colour monitor, keyboard, mouse, System 7.1, *ClarisWorks* etc, all manuals, light home use – £500. ☎ 0113 275 7523

■ **PowerBook 540 12/320,** modem, batteries, charger, case, excellent condition, home use only, RRP £3,500 – will accept £2,500 ono. ☎ 0116 246 1412 or ☎ 0116 241 5221

■ **Centris 650 8/230** NuBus Ethernet card – £495; CPU only Mac Plus 4/20 – £250; lots of licensed software with both. ☎ 0181 730 2227 (daytime)

■ **LaserWriter Select 360,** 600dpi, hardly used, home use only, six months old, still under full warranty, complete with manuals etc – £975 ono. ☎ 0131 228 6623

■ **Performa 630 8/350 CD,** System 7.51, boxed, mint condition – £750. Jason, Derby ☎ 01332 204253

■ **Mac LCII 4/40,** mouse, monitor and keyboard, *ClarisWorks* software plus manuals – £300 ono. ☎ 01384 291275

■ **Mac LCIII 8/80,** colour monitor, keyboard, mouse, excellent condition – £800 ono. ☎ 01384 291275

■ **Performa 630 8/350** CD CPU, TV, video, Fast text, five months old, boxed, guaranteed, System 7.5, original manuals, disks etc, as new – £700 ono. ☎ 01248 656970

■ **LCIII 4/80,** *RAM Doubler,* System 7.1, Performa 14-inch monitor, keyboard, mouse, microphone, manuals, home use only – £600 ono. Telford ☎ 01952 404564

■ **PowerBook Duo** 210 4/80 with StyleWriter II printer, bag, manuals,

UK USER GROUPS

The User Group Council provides a list of all the user groups registered with them. If you wish to contact the Council, ask for John McKnight ☎ 0181 314 5555.

Local user groups:

■ Aston University Mac UG, Birmingham area, contact Ray Tier ☎ 0121 359 3611
■ Berkshire Mac UG, Ian Burn ☎ 01734 813669
■ Blackburn Mac UG, Roger Moreton ☎ 01254 670043
■ Bournemouth Mac UG, Barry Cheesman ☎ 01202 615859
■ Bristol (BAUD), Malcolm Ingsley ☎ 01454 616846
■ Cambridge Apple UG, Ian Archibald ☎ 01223 311157
■ Cancer Research/RMH UG, Raymond Henry ☎ 0181 643 8901 ext 4636
■ Edinburgh Apple UG, John Beatie ☎ 0131 554 5096
■ Gateway UG, Norfolk area, Verne Anderson ☎ 01638 513000
■ Glasgow Mac UG, Stephen Broadfoot ☎ 0141 339 6646
■ Hampton Court UG, Sabre Gilmartin ☎ 0181 979 0262
■ Herts/Beds Apple UG, Norah Arnold ☎ 01582 573918
■ Highland Mac UG (HIMUG), Scottish Highlands, Bob Warner ☎ 01463 715322
■ Liverpool Apple UG, Irene Flaxman ☎ 0151 928 4142 or 0151 949 0307
■ London Mac UG, John McKnight ☎ 0181 314 5555
■ Mac Assist, Cardiff and district, Nigel Arrighi ☎ 01222 224682
■ Midapple, West Midlands, William Watson ☎ 01384 277921
■ Midland Mac UG, Worcestershire, Ivan Knezovich ☎ 01299 402631
■ North West Apple C C, George Evans ☎ 01270 583714
■ Nottingham Mac UG, David Nicholson-Cole ☎ 0115 945 5077 or 0115 945 5444
■ Poole Mac UG, Bob Lister ☎ 01202 684441
■ S E Essex Mac UG, Michael Foy ☎ 01702 468062
■ Southampton Mac UG, Clive Marklow ☎ 01703 293453
■ Southern Mac UG, Salisbury area, Roger Ford ☎ 01722 780102
■ Southwest Mac UG, John Elver ☎ 01272 693119
■ Staffordshire Poly Mac UG, Mark Stiles ☎ 01785 52331
■ Sussex UG, Hastings & E Sussex, Garry Nevin ☎ 01424 714110
■ West Midlands UG, Danny Torbica ☎ 01902 336172
■ Yorks & Humberside Mac UG, David Vardy ☎ 01423 358853

Thematic User Groups:

■ BAPC (Printers), Derek House ☎ 01228 513621
■ Christian Mac UG, Paul Wareing ☎ 01789 490153
■ Corel Draw UG, Jill Foster ☎ 01509 415101 or 01509 620442
■ Developers UG, John French ☎ 01895 672654
■ HebreWare, Mendy Scharf ☎ 0181 802 6143
■ Helix UG, John Sandell ☎ 01763 273379
■ Independent School UG, Ian Carter ☎ 01252 512151
■ LAW Mac UG, Charles Christian ☎ 01379 88518
■ Lisa Users Group UK, Sheila Bell ☎ 01367 710453
■ MacBaud ☎ 01685 58027
■ MacLaw, Nicholas McFarlane-Watt ☎ 01865 784777
■ Medical UG, Keith Davey ☎ 01836 348284
■ Microsoft UG, ☎ 01252 834995 – ask for Enquiries
■ Multimedia UG, Richard Hurley ☎ 01273 834588
■ PageMaker UG, David Foster ☎ 01509 415101
■ QUAD Club (QuarkXPress), Philip Caplan ☎ 0181 523 4233
■ School Mac, Gloucestershire, Bill Henley ☎ 01453 825422
■ School Mac UG, Cambridge, Derek Smith ☎ 01945 584146
■ Scottish HyperCard UG, Tim Anderson ☎ 01698 740535
■ Special Needs UG (SNUG), Geoff Hughes ☎ 01744 24608
■ Strata UG, Roger Harris ☎ 01227 369689
■ The British IIGS UG, Peter Stark ☎ 01223 838231
■ Young Mac ☎ 01795 535472

USER GROUPS

Need hands-on help with a Mac problem? Want to swap shareware or freeware, or just meet other Mac enthusiasts? Try a user group near you.

■ Midapple, the Mac users' group in the West Midlands. Monthly meetings and a newsletter. Send SAE for information to Midapple, 24 High Street, Wall Heath, Kingswinford, West Midlands, DY6 0HB. (MF36)

■ Brighton Hanover Computer Club for Mac, IBM and Amiga users. Meet fourth Tuesday in every month at the Hanover Centre, 33 Southover Street, 8pm. Contact Colin ☎ 01273 602834. (MF36)

■ The Mac Factory BBS. Specialises in Mac shareware. ☎ 01977 708911 (24hrs). SysOp Mark Evans. (MF37)

■ Massacre Bulletin Board now on-line. Modem speeds up to 14,400 24 hrs. ☎ 0131 447 9199 (MF37)

■ Red Apple Software, the Distribution Group! Non-profit making shareware authors, an established network for old & new programmers. Write to: RAS, Lane End, Oak Tree Lane, Tavistock, Devon PL19 9DA or log on to AppleEye BBS on 01234 822180. Red Apple/PentriSoft in the Computing conferences folder. (MF37)

■ The SE Essex Mac User Group meets in Southend, second Monday of the month at 8pm. Mike Foy ☎ 01702 468062 or e-mail **mac@mikefoy.demon.co.uk** (MF38)

■ A new first class BBS, Xnet UK ☎ 01992 550733. A local number to all London numbers, devoted to all subjects for problems. (MF38)

■ Media Club – the best Portuguese Mac user group. Free on-line help via Telnet International. Please send SAE to Media Apartado 15006-1073, Lisboa, Codex, Portugal. (MF39)

■ Australia Queensland Toowoomra Mac user group. 202 Darling Street, Drayton, Toowoomra, Queensland, Australia 4350 or ☎ 61 076 333383 or fax 61 076 333383 (MF39)

■ Appel Club Eindhoven (ACE), 80 members, informal setup, ten meetings a year, fee Dfl 25/yr. Contact Arie Nagel, Puthof 5, 5655 AM Eindhoven, Netherlands ☎ 040 2523879 or e-mail **a.p.nagel@tm.tue.nl** (MF40)

■ New Mac user group, Helensburgh, Strathclyde. Peter Stevens ☎ 01436 676621 (MF40)

■ Mac User Oxford – non-profit user group and shareware library, seasonal shareware catalogue, small fee for printing etc. SSAE: 30 Sandfield Road, Headington, Oxford, OX3 7RJ. (MF 41)

Groups are listed here for six issues, then deleted to help weed out defunct groups. The code at the end of each entry is the last issue in which it will appear. If you want your entry renewed, send in the coupon below. If your group isn't listed here, send us your details! This list is provided as a free service for amateur, non-profit-making Mac user groups. MACFORMAT does not endorse or recommend any group and cannot be held responsible for any problems you might suffer as a result of contacting any of the groups advertised here.

extra software £550. Robert, Aberdeen ☎ 01224 635686 (before 8pm)

■ Epson GTX 9000 **colour flatbed scanner** for Mac, 2400dpi and 30-bit colour sampling, very light use – £550. ☎ 01638 660551

■ **Quadra 660 AV 8/250 CD,** System 7.5, keyboard, mouse, joystick, with box and manual – £800. Roland ☎ 01926 852489 (eve)

■ **Performa 630 20/350 CD** TV/video, 15-inch MultiScan monitor, keyboard – £1,100. ☎ 01392 52809

■ **Performa 450 8/120,** CD300e, 14-inch Performa monitor, keyboard, manuals, games, FPU – £800 ono. Fleur ☎ 01789 765231 or e-mail **Fleur@nannyogg.demon.co.uk**

■ **SE/30 8/340,** System 7.5, keyboard and mouse – £450; Formac 19-inch high resolution monitor and card for SE/30 – £250. ☎ 01689 817399

■ **PowerBook 165B 4/80,** external US Robotics 14.4K fax/modem, *RAM Doubler, ClarisWorks,* excellent condition – best offer secures. David, Milton Keynes ☎ 01908 318540 (after 7pm)

■ **660AV CPU 8/500 CD** – £950; LC475 4/160 – £480; IIci 4/40 – £400, *Meta Flo* software – £80; *Director, Photoshop 3, Premiere 4* and others residing on hard disks. ☎ 0113 246 9254

■ **Apple PowerBook 170 4/40** including power supply, battery and many extras in immaculate condition – £690. ☎ 0181 552 0250

■ **LCII 4/80,** 13-inch colour monitor, three in one CD player, Hewlett-Packard 510 black and white printer, with cartridge, all complete, all very good condition – £750 ono. Steve ☎ 0161 798 0391

■ **RAM:** 8Mb 72-pin SIMM – £140. Bath ☎ 01225 859094

■ **Performa 600 CD** 20/80, manuals, System 7.5, 14-inch monitor, keyboard, mouse, DeskWriter 550C – £999. Keith ☎ 0117 955 4473 (daytime), 0117 976 1604 (eve)

■ Performa 400 4/40, CPU only – bargain at £200 or complete with keyboard and monitor for £400. Cardiff ☎ 01222 456164

■ **PowerBook** 160 10/80; PowerBook 5300 CS 16/500; 160 Mb hard drive, 14-inch monitor, CD-ROM, ColourJet printer, keyboard mouse, two joysticks; *Doom 2* CD, *MS Works, Myst* CD, *Discworld* CD, *Think C* and others – offers. Willing to split. ☎ 0585 775505 (6pm to 9pm)

■ **Epson Stylus Pro** XL A3 colour 720dpi printer, six months old, hardly used, with special paper – £1,000 ono ☎ 01722 324337 (eve)

■ **8Mb SIMM** for PowerBook Duo 210/230 250/270c 280/280c – £150. ☎ 01327 261228

■ **4Mb SIMM** for PowerBook Duo 210/230 250/270c 280/280c – £75. ☎ 01327 261228 (answerphone)

■ **Apple II to Mac conversion,** Apple IIe PDS card for LC range – £100; Mac-compatible 5.25-inch disk drive (Apple) – £100. Bernard ☎ 01737 353828

■ **Quadra 8/500 AV** CD, HP printer, Geoport modem, MIDI & lots of music/DTP software – £1,500. John ☎ 01539 727295

■ Radius 15-inch colour Precision Pivot **monitor,** with software and cables, as new – £290. Near Slough, Berks ☎ 01753 643309

■ **Apple Presentation Systems** for sale, as new for 630, 5200, 5300, 6200 machines – £180 ono. K McGarry ☎ 01205 365701 ext 414 (day)

■ Epson GT6500 **colour flatbed scanner,** mint condition – £250; optical 128Mb drive – £250 ono; *Photoshop 2.5* – £100. Home use only. ☎ 0181 998 8332 (eve)

■ **PowerBook Duo 210 4/80,** hardly used, complete with System disks, manuals etc. Excellent second machine – £450 ono. David, Yorkshire ☎ 01757 700704

■ **Quadra 840AV** 8/1Gb CD, 13-inch Apple monitor, keyboard, mouse, microphone – £1,750 ono. Gareth ☎ 01203 679935 (eve)

■ **IIci 32/540,** Daystar Turbo 040 40MHz accelerator, 20-inch 8-bit colour monitor and card (also 14-inch), EtherNet. HP G/S scanner, Apple 2x CD, 44Mb SyQuest drive – offers, will split. Keith ☎ 01932 873328

■ **PC card,** 486 DX2 66MHz, for PowerMac 6100, with DOS 6.2, Windows 95 and Mac software, four months old. ☎ 01462 815788

■ **PowerBook Duo 230 8/120,** Express 14.4K modem, Duodock with 1Mb VRAM, 2Gb hard drive, 14-inch Apple Trinitron, extended keyboard, mouse, all cables – £1,400 ono, will split. ☎ 01225 862506

■ **4Mb SIMM** for PowerBook 500 series (520, 520c, 540, 540c). Boxed with installation instructions – £100. Tom ☎ 01904 634166

■ GV Teleport Gold **fax/modem**

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14,400bps inc software – £120 or swap for PowerBook 100. John ☎ 01784 477386 or e-mail **jgibbs@tasis.com**

■ **LC 10/500 68030 accelerator,** FPU, 14-inch Trinitron screen, Apple CD-ROM drive, new shape mouse, quality software loaded – £850. Mike, York ☎ 01347 810685

■ Frog Systems **270Mb external hard drive,** unused disk – £80. Mike, York ☎ 01347 810685

■ **LCII 5/160,** 14-inch colour Apple monitor, keyboard, mouse, manuals, disks, original packaging, System 7.1, excellent condition – £550 ono. Staffs ☎ 01283 512154

SOFTWARE FOR SALE

■ ***FreeHand 5,*** still sealed in original packaging – £200. ☎ 01392 284854 (after 7pm)

■ ***Artist in Residence,*** *Fresco,* graphics programme with textures for presentation and design, new and unused due to high memory requirements – only £50. ☎ 0181 761 5019

■ ***FoxPro 2.6*** database, all manuals etc, needs 68020 or greater – £50 ono. Kevin ☎ 0171 828 8709

■ ***Monkey Island*** – £10; *RedShift* – £20. Good condition. Or will swap *Monkey Island* for *Monkey Island 2.* ☎ 01373 836837

■ ***Adobe Photoshop 3,*** full version, complete, sealed, unregistered package, unwanted bundle item, RRP £725 – bargain at £250. ☎ 01752 345111

■ ***RAM Doubler 1.5.2*** – £35. ☎ 01235 526013 (after 6pm)

■ ***SoftWindows 2,*** new – £150. Steve ☎ 01869 338013 (after 6pm)

■ ***Doom 2,*** *Ghost, Dark Seed* – £60; *Myst, Dark Forces, Astro Chase* – £60; or £110 the lot. Also 4Mb 72-pin **SIMM** – £60. ☎ 0181 398 2809

■ ***Newton Connection Kit 2,*** three original HD diskettes and Newton Software Sampler diskette, plus 2m cable and manuals (new) – £40. Zain ☎ 0161 795 6105

■ ***Adobe Photoshop 3,*** full version, unused and unregistered, still wrapped. Offers to Mike ☎ 0171 792 3732

■ ***PageMaker 5*** plus ***FreeHand 5,*** all manuals, boxes and documents – £300 together or £200 individually. Barry or Lance, Wakefield ☎ 01924 371100 (daytime)

■ ***RAM Doubler 1.5.2*** and manual – £36. Gerry Clarke ☎ 01232 763858

■ Apple **System 7.1** boxed with manuals, original disks – £20; games boxed with original disk and manuals; books on Macs – call for details ☎ 0181 548 0403

■ ***Star Trek*** *Omnipedia* CD-ROM, new, unopened – £25. ☎ 01438 712000

■ ***Aldus Persuasion 2.1,*** fully boxed with original disks, manuals can be upgraded – £45. ☎ 0181 552 0250

■ **New boxed games:** *Marathon 2* – £39; *Descent* – £29; *Doom 2* – £32; *Korean Crisis* – £29; *Journeyman* – £13; *Lunicus* – £9; *SimEarth* – £7; *ATM* – £8. Damon ☎ 0121 711 1766 (eve)

■ ***Syndicate*** – £8; ***Populous*** – £5; or both for £10. Both unregistered and in mint condition, postage included. ☎ 01494 763774 (eve)

■ ***Microsoft Word 5.1a*** for PowerMac. ☎ 01382 543302

■ ***Flashback*** – £12; *SimTown* CD – £17; *Al Unser Junior Arcade Racing* CD – £13. Mint condition. Bristol ☎ 0117 977 8602 (eve)

■ ***PageMaker 5,*** all manuals, boxed as new plus *PageMaker Made Easy* (audio cassette and disk) – £150. Russ ☎ 0181 954 1973 (eve/w'end) or 0181 950 4000 ext 7311 (daytime)

■ ***Photoshop*** *Deluxe* 3 (CD), not boxed but perfect – make me an offer! Other games, *ClarisWorks* etc, maybe a RAM swap. Southend ☎ 01702 551292

■ ***Bitfolio World Maps*** – £10; *Bitfolio CD-ROM Clip art* – £25; *ClarisWorks 3* – £25; *ColorStation* – £20; *Expert Landscape Design* – £10; *KeyCAD 1.5* – £10; *PageMaker 4.2* – £45. Mike, York ☎ 01347 810685

■ ***Photoshop LE*** – £30; *Publish It! Easy* – £20; *Redux* – £10; *StuffIt Delux* – £20; *Super ATM* – £30; *Textbridge* – £25; *QuickDex* – £10; *Photofix 3.0* – £25. Mike, York ☎ 01347 810685

WANTED

■ Mac LC seeks **two 2Mb SIMMs** for long and happy partnership. Kingsbridge ☎ 01458 550254. Cheers!

■ **StyleWriter II** or **DeskWriter C,** West Scotland ☎ 01852 500662

■ **DDA box** for PowerBook Express Modem, monitor adaptor for PowerBook (PowerBook to 15-pin). ☎ 0161 429 0755

■ ***The Grouch*** for my wastebasket, or anything else of equally banal use will be greatly appreciated. Richard ☎ 0161 973 5226 (after 5pm)

■ ***AutoCAD 12*** for Mac – willing to pay up to £50. Ciaron ☎ 01693 830581 (after 5pm)

■ ***MacPaint, MacWrite, MacCheese*** original disks and manuals. ☎ 0171 733 5915 (eve)

■ **MacII/early Macintoshes,** Apple Extended keyboard II, Apple PlainTalk microphone – all needed by a student. ☎ 0973 787898

■ **Quadra or PowerMac** hardware with monitor and keyboard accessories – under £1,100. North West ☎ 01298 24900

BOOKS AND MAGAZINES

■ **MACFORMAT Cover CDs** complete 19 copies except for Feb, May, June '95 – best offer wins. ☎ 0171 267 9014

■ 15 of the latest issues of MACFORMAT – open to offers. ☎ 0181 548 0403

SWAP SHOP

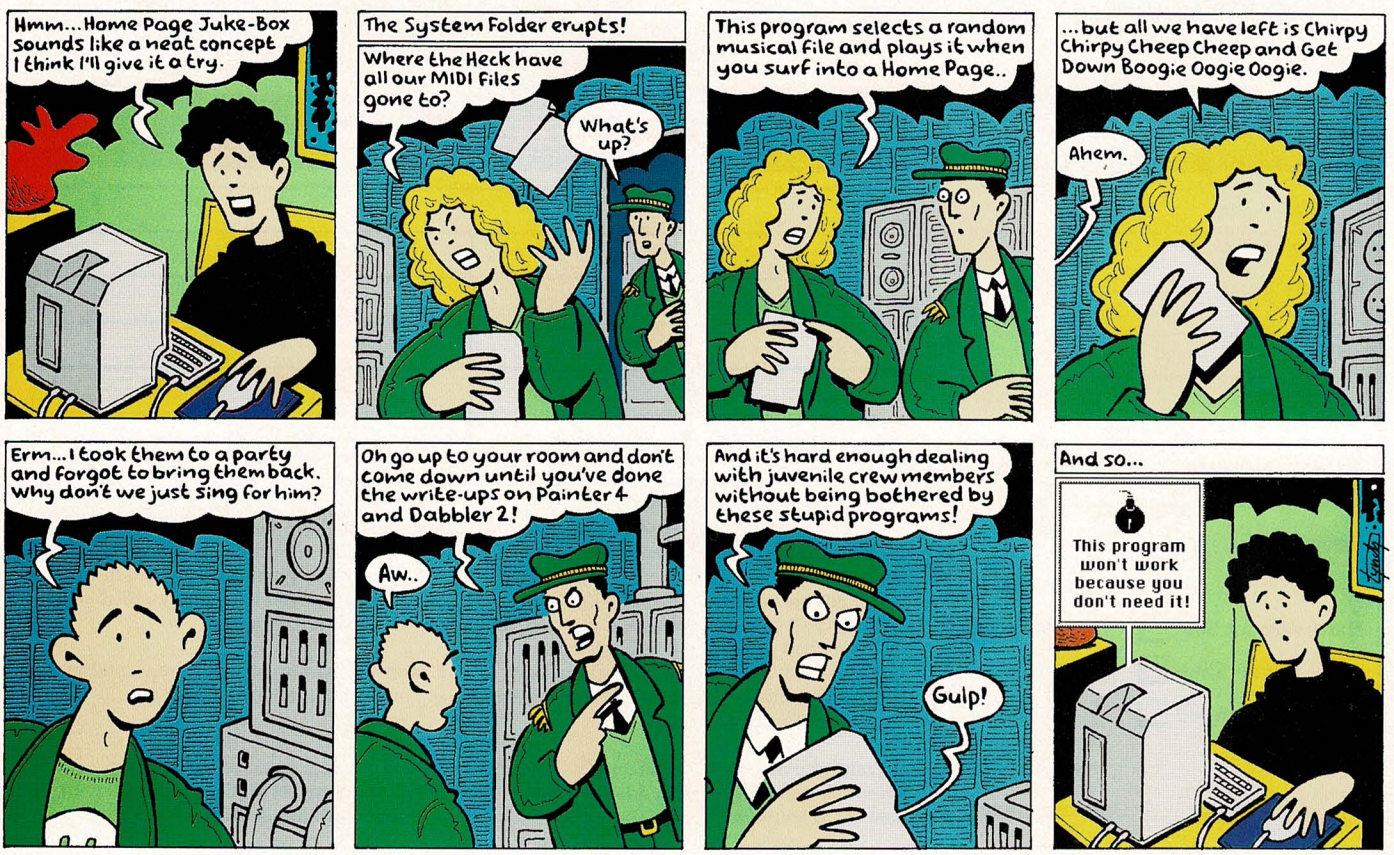
■ Swap ***Microsoft Dinosaurs,*** *San Diego Zoo's The Animals,* and *The Journeyman Project* with similar educational CDs or offers. Zain ☎ 0161 795 6105

■ ***FreeHand 5.5*** or ***Photoshop 3*** for *XPress 3.31* native. ☎ 0121 554 6947

■ **Swap 486PC,** local bus graphics, 4MB, 210 hard disk, keyboard, mouse, software for 68040-based Mac, base unit and keyboard (no monitors involved). ☎ 01935 25974 **MF**

The Classic System Crew

By Bob Lynch


Hmm... Home Page Juke-Box sounds like a neat concept I think I'll give it a try.
The System Folder erupts!
Where the Heck have all our MIDI Files gone to?
What's up?
This program selects a random musical file and plays it when you surf into a Home Page..
...but all we have left is Chirpy Chirpy Cheep Cheep and Get Down Boogie Oogie Oogie.
Ahem.
Erm... I took them to a party and forgot to bring them back. Why don't we just sing for him?
Oh go up to your room and don't come down until you've done the write-ups on Painter 4 and Dabbler 2!
Aw..
And it's hard enough dealing with juvenile crew members without being bothered by these stupid programs!
Gulp!
And so...
This program won't work because you don't need it!

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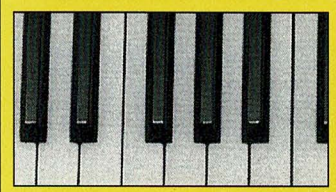

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Feeling the squeeze – the Tiny Zone

Hello and welcome again to Tiny Zone, the section of MACFORMAT that fits in this space, no matter how small it gets. Apple's financial woes are still in the news – you might even have heard MACFORMAT's Editor on Radio 5's *Big Byte* again, proving his ignorance a second time... But it's worth noting that Apple is going from strength to strength in Europe and the UK, with sales soaring by 18% in the last year. And apart from Apple itself, everyone at the Macworld show in San Francisco was in party mood, thanks to the continuing boom in the Mac market. (At least, that's what Richard and Colin told us when they got back, covered in confetti and carrying empty champagne glasses. And they *swore* their headaches were just down to jet lag.) A leaked Apple internal memo confirms that more companies applied to become registered developers than ever before, and there's a flood of great new products just around the corner. The only catch is, the fastest growth is in new technologies like PCI plug-ins, QuickDraw 3D and the PowerPC chip itself. The irony is, if you've already got a Mac, things are developing so fast that it's likely to be obsolete by about the middle of next week.

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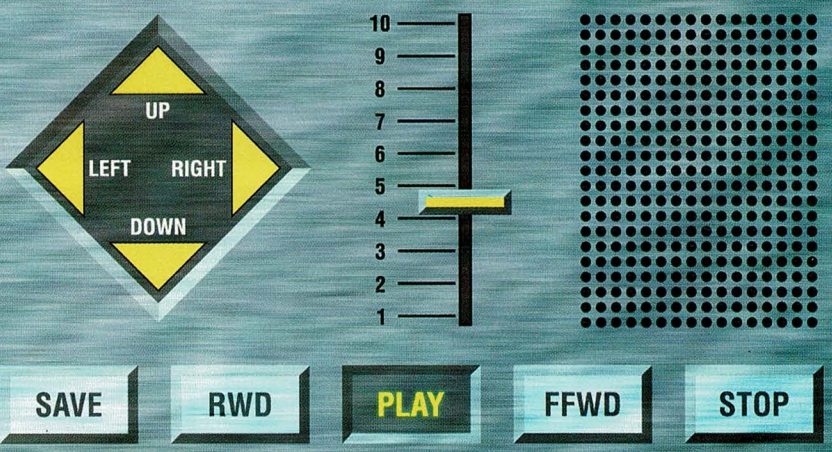

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PLUS So how does *LightningDraw GX*, the first QuickDraw-GX-based drawing program, shape up? ■ The *HyperCard*-based organiser that doesn't look a bit like *HyperCard* ■ *Star Wars* spectacular – *Rebel Assault 2* and *X-Wing* reviewed ■ All the latest news and practical how-to's

ARE YOU A WINNER?

Back in MACFORMAT 31, we gave you the chance to win one of ten copies of the top PC compatibility software, *SoftWindows 2.0*, courtesy of Insignia Solutions – and just to make it more of a challenge, you had to 'spot the ball'... or at least guess where the cursor was on a *SoftWindows* screen. The first ten correct entries picked from the box were from: John Poole of Harrow, Middx; Mary Edmonds of Congleton, Cheshire; Gordon Bolton of Redditch; Doreen Fahy of County Mayo; Stephen Doherty of Dublin; Brian Quinn of Harrogate, North Yorks; Ms E Bingham of Sheffield; Mr R Downton of Winscombe, Avon; Mr A Saracli of Paignton, Devon; and Mike Smith of Newcastle upon Tyne. Well done, all! The cursor was of course in the space to the right of the line containing the highlighted word. (The most popular guess though was on the Cancel button. Wonder why?)

***MACFORMAT 36* goes on sale on Thursday 14 March**

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Win a copy of Marathon 2

Read the review? Finished the demo? Hungry for more? We're giving away a dozen copies of *Marathon 2: Durandal*, worth over £750, courtesy of Softline.

With outstanding graphics, realistic sounds, a deranged computer guide, and lava, slime and aliens everywhere, *Marathon 2* could be rather more game than you bargained for.

Marathon 2: Durandal is the much-anticipated sequel to last year's Mac game heavyweight, *Marathon*, from Bungie Software. It's reviewed this issue on page 116, where we rate *Marathon 2* as serious fun, giving it a storming 95% overall and ensuring it a much deserved Classic Award.

The plot is simple. You've been in deep freeze since the end of the original *Marathon* – a long, cold 17 years – without so much as a Rubik's Cube to keep you occupied. You now wake to find yourself on a unknown and hostile planet surrounded by the Pfhor – your deadly alien enemies. Your only guide through his chaotic situation is Durandal, a deranged computer that you fervently hoped you had seen the last of at the end of *Marathon*. You must help him find a lost alien race, wipe out the Pfhor, and assist the Tau Ceti colonists in their return home. Think you can have all this finished in time for tea? Think again. With its 28 levels of solo mayhem, 11 levels of co-operative network bloodshed, and six difficulty levels, you could be kept busy here for rather longer than you originally bargained.

Marathon 2 retails at over £60, but we've got 12 copies to be won, courtesy of Softline – a major distributor of Mac games and other programs in Britain, which provides mail order dealers and shops all over the country with the latest titles. Without Softline's behind-the-scenes work, you'd find it harder to get the games you want as quickly and easily as you can now.

To win your copy of *Marathon 2*, just answer the three simple questions on the left, and send us your entry on the back of a postcard or sealed envelope. The closing date for receipt of entries is Friday 22 March 1996.

THE QUESTIONS

1. In *Marathon 2: Durandal*, you must pit your wits against which vile alien race?
(a) The Pfhor
(b) The Empire
(c) The PC

2. What is the artificially-intelligent computer who guides you in the game called?
(a) Mr Blobby
(b) R2D2
(c) Durandal

3. Which of the following is *not* one of *Marathon 2's* features?
(a) Co-operative network play with up to eight players
(b) 16-bit sound and graphics
(c) You get a free rocket launcher with every copy

No problem, eh? Send your answers on a postcard or sealed envelope to: 'Not the London Marathon' compo, MACFORMAT, 30 Monmouth Street, Bath BA1 2BW.

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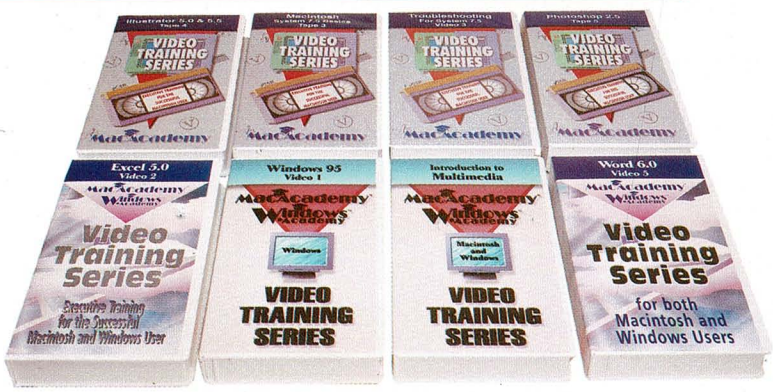
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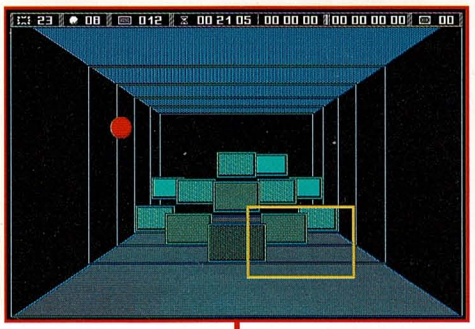
ON THE DISK THIS ISSUE...

There's something for everyone on the Disk this issue, from two hugely addictive games to a great collection of essential Mac utilities, including programs that copy files in batches and squeeze more space from each floppy disk. Or, if you just want to sit down with a cool beer, we have software that shows you how to brew your own.



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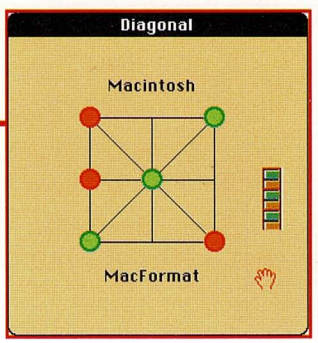
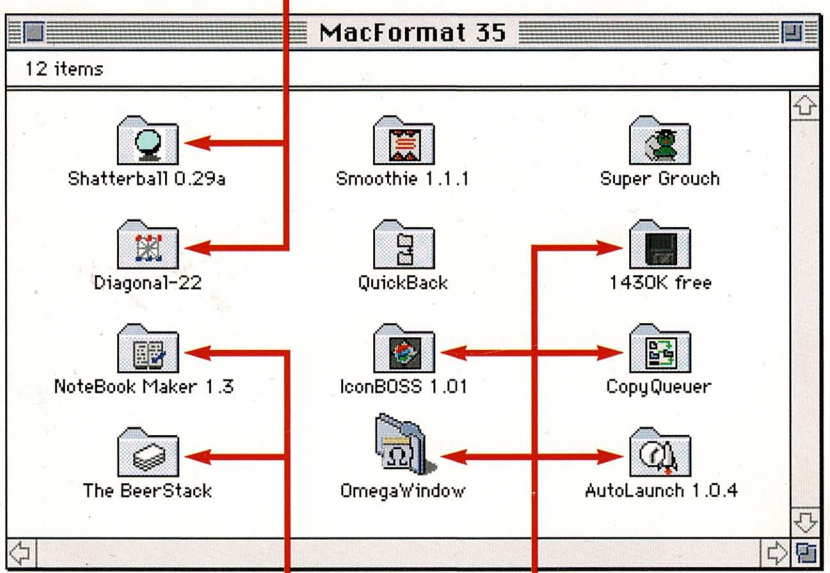
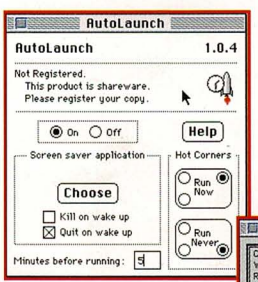
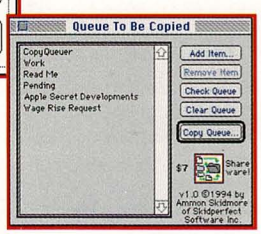


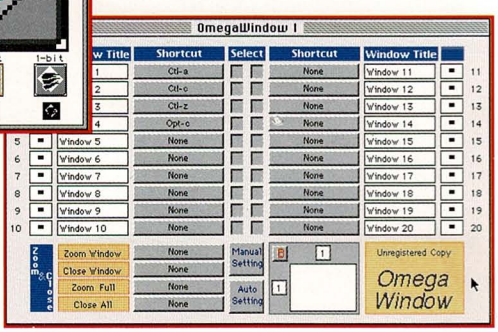
DIAGONAL

Diagonal is a tricky brain game in which you pit your skill and tactical abilities against your Mac. It's a cross between draughts and noughts and crosses – all you have to do is move your pieces around in an effort to get them into a diagonal line. Sounds simple? Wait till you try it!



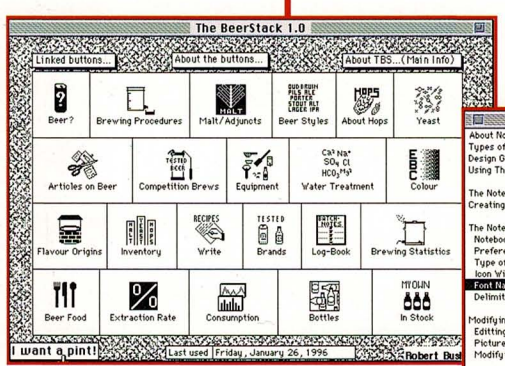






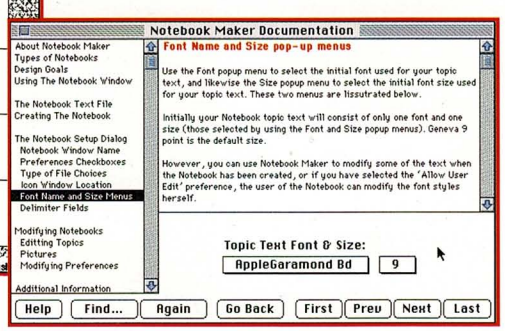
UTILITIES

OmegaWindow enables you to control your Finder windows and applications without the mouse, using any key combinations you set. *CopyQueuer* is a handy piece of software that enables you to copy files in batches rather than one at a time. *AutoLaunch* is a screen saver that launches software automatically after your Mac has been idle for a predetermined period of time. *1430K Free* squeezes that little bit of extra space out of any normal high density floppy disk. Finally, if you want to give your Desktop a custom look, create your own custom icons using *IconBoss*.



THE BEERSTACK

If there's anything you want to know about brewing your own beer, *The BeerStack* is a great place to start. This comprehensive *HyperCard*-based program gives you a mind-boggling amount of information about brewing. Everything you could want is here, from what all the terminology means to keeping track of how much you actually drink.



NOTEBOOK MAKER

Notebook Maker enables you to turn any standard *SimpleText* file into a standalone application – which means anyone can open it without needing any other software. You can even add linked index headings to make your file easy to browse through.